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<170> PatentIn Ver. 2.1

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<212> DNA
<213> Homo sapiens
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<210> 9
 <211> 2369
 <212> DNA
 <213> Homo sapiens

<220>
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 <222> (1)..(2369)
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 <211> 1101
 <212> DNA
 <213> Homo sapiens

<220>
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<210> 11
<211> 4628
<212> DNA
<213> Homo sapiens

<220>
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<223> any n = a,c,g,t any unknown or other

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<210> 12
<211> 1418
<212> DNA
<213> Homo sapiens
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<223> any n = a,c,g,t any unknown or other
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<210> 13
 <211> 1558
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc_feature
 <222> (1)..(1558)
 <223> any n = a,c,g,t any unknown or other

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<210> 14
 <211> 1911

<212> DNA
<213> *Homo sapiens*

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<220>
<221> misc_feature
<222> (1)..(1911)
<223> any n = a,c,g,t any unknown or other
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<211> 2971
<212> DNA
<213> Homo sapiens
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<223> any n = a,c,g,t any unknown or other
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<210> 31
<211> 2307

<212> DNA
<213> Homo sapiens

<220>
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<223> any n = a,c,g,t any unknown or other

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<210> 32
<211> 1712
<212> DNA
<213> Homo sapiens

<220>
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<223> any n = a,c,g,t any unknown or other

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aatttttggta tgaagccatt aaattaattt cttgccccatca tgagcagaag caagcgtgac 180
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<210> 33
<211> 1068
<212> DNA
<213> Homo sapiens
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<222> (1)..(1068)
<223> any n = a,c,g,t any unknown or other
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ggagctcaag gaatagtatg cgcaagttat gatgccattc ttgaaagaaa tggcaatc 180
aagaagctaa gccgaccatt tcagaatcag actcatgcca agcgggccta cagagagta 240
gttcttatga aatgtgttaa tcacaaaaat ataattggcc tttgaatgt tttcacacca 300
cagaatccc tagaagaatt tcaagatgtt tacatagtca tggagctcat ggatgcaa 360
cttgcctaa tgattcagat ggagcttagat catgaaagaa tggcttaccc tctctatcc 420
atgctgtgtg gaatcaagca ctttcattct gctggaaattt ttcatcgggc cttaaaggcc 480
agtaatatacg tagtaaaatc tgattgcact ttgaagattc ttgacttcgg tctggccagg 540
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atgggagaaa tggttgcca caaaatcctc tttccaggaa gggactatat tgatcagtgg 720
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acagtaagga ctacgttga aaacAGACCT aaATATGCTG gATATAGCTT tgAGAAACTC 840
ttccctgatg tcctttccc agctgactca gaacacaaca aacttaaAGC cAGTCAGTAC 900
tttttacaaa tatgtacatt taatcccatt tgggtgtgt agtgtgtgt tnatgggtt 960
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ggggaaaaaaa tgaggTTTT tctttaatct tataTATT 1068

<210> 34
<211> 1388
<212> DNA
<213> Homo sapiens

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<222> (1)..(1388)
<223> any n = a,c,g,t any unknown or other

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ggagCTCAAG gaATAGTATG CGCAGCTTAT gATGCCATT TgAAAGAAA tGTTGCAATC 180
aAGAAGCTAA gCCGACCATT tcAGAATCAG ACTCATGCCA AGCGGGCCTA cAGAGAGCTA 240
gttCTTATGA aATGTGTTAA tcACAAAAT ATAATTGGCC TTTGAATGT tttcacacca 300
cAGAAATCCC tagAAGAATT tCAAGATGTT tacATAGTCA tGGAGCTCAT gGATGCAAAT 360
cttGCCAAG tgATTCAAGAT gGAGCTAGAT catGAAAGAA tGTCCTACCT tCTCTATCAG 420
atGCTGTGTG gaATCAAGCA CCTTCATTCT GCTGGAATT TtCATCGGGA CTTAAAGCCC 480
agTAATATAG tagTAAAATC tgATTGCACT ttGAAGATTt tGACTTCGG tCTGCCAGG 540
actGcAGGAA CGAGTTTAT gATGACGCCt tATGTAGTCA CTCGCTACTA cAGAGCACCC 600
gaggTCATCC ttGGCATGGG ctACAAAGGA aACGTGGATT tATGGTCTGT gGGGTGcATT 660
atGGGAGAAA tGGTTGCCA caAAATCCTC tttCCAGGAA gGGACTATAT tgATCAGTGG 720
aataaagtta ttGAACAGCT tGGAACACCA tGTCCTGAAT tCATGAAGAA actGCAACCA 780
acAGTAAGGA ctTACGTTGA aaACAGACCT aaATATGCTG gATATAGCTT tgAGAAACTC 840
ttccctgatg tcctttccc agctgactca gaacacaaca aacttaaAGC cAGTCAGGCA 900
aggGATTGt tatCCAAAAT gCTGGTAATA gATGCACTA aAAGGATCTC tGTAAGATGAA 960
gCTCTCCAAc ACCCGTACAT CAATGTCTGG tATGATCCTT CTGAAGCAGA AGCTAGAAGC 1020
tgtaAGTTAT tttCTTAATG tttACAGAAc ATATTGATT CTTAGAGTT GAATGACAGT 1080
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cACAAAATAA agTTACtCC CACTGTTTT tGCAATCTG CCTGGATAcc TAACCAGAGA 1260
actAGGATGT tGAATGCTC tGGGGAAACAT CCTAACTCAG GTATAAAACA AATTACTGTA 1320
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<211> 1452
<212> DNA
<213> Homo sapiens

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<210> 36
 <211> 2355
 <212> DNA
 <213> Homo sapiens

<220>
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 <222> (1)..(2355)
 <223> any n = a,c,g,t any unknown or other

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 <211> 497
 <212> PRT
 <213> Homo sapiens

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 Gln Ala Lys Lys Val Ile Thr Met Phe Val Gln Arg Gln Val Phe Ala
 35 40 45
 Glu Asn Lys Asp Glu Ile Ala Leu Val Leu Phe Gly Thr Asp Gly Thr
 50 55 60
 Asp Asn Pro Leu Ser Gly Gly Asp Gln Tyr Gln Asn Ile Thr Val His
 65 70 75 80
 Arg His Leu Met Leu Pro Asp Phe Asp Leu Leu Glu Asp Ile Glu Ser
 85 90 95
 Lys Ile Gln Pro Gly Ser Gln Gln Ala Asp Phe Leu Asp Ala Leu Ile
 100 105 110
 Val Ser Met Asp Val Ile Gln His Glu Thr Ile Gly Lys Lys Phe Glu
 115 120 125
 Lys Arg His Ile Glu Ile Phe Thr Asp Leu Ser Ser Arg Phe Ser Lys
 130 135 140
 Ser Gln Leu Asp Ile Ile His Ser Leu Lys Lys Cys Asp Ile Ser

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165	170	175	
Asp Arg Gly Asp Gly Pro Phe Arg Leu Gly Gly His Gly Pro Ser Phe			
180	185	190	
Pro Leu Lys Gly Ile Thr Glu Gln Gln Lys Glu Gly Leu Glu Ile Val			
195	200	205	
Lys Met Val Met Ile Ser Leu Glu Gly Glu Asp Gly Leu Asp Glu Ile			
210	215	220	
Tyr Ser Phe Ser Glu Ser Leu Arg Lys Leu Cys Val Phe Lys Lys Ile			
225	230	235	240
Glu Arg His Ser Ile His Trp Pro Cys Arg Leu Thr Ile Gly Ser Asn			
245	250	255	
Leu Ser Ile Arg Ile Ala Ala Tyr Lys Ser Ile Leu Gln Glu Arg Val			
260	265	270	
Lys Lys Thr Trp Thr Val Val Asp Ala Lys Thr Leu Lys Lys Glu Asp			
275	280	285	
Ile Gln Lys Glu Thr Val Tyr Cys Leu Asn Asp Asp Asp Glu Thr Glu			
290	295	300	
Val Leu Lys Glu Asp Ile Ile Gln Gly Phe Arg Tyr Gly Ser Asp Ile			
305	310	315	320
Val Pro Phe Ser Lys Val Asp Glu Glu Gln Met Lys Tyr Lys Ser Glu			
325	330	335	
Gly Lys Cys Phe Ser Val Leu Gly Phe Cys Lys Ser Ser Gln Val Gln			
340	345	350	
Arg Arg Phe Phe Met Gly Asn Gln Val Leu Lys Val Phe Ala Ala Arg			
355	360	365	
Asp Asp Glu Ala Ala Ala Val Ala Leu Ser Ser Leu Ile His Ala Leu			
370	375	380	
Asp Asp Leu Asp Met Val Ala Ile Val Arg Tyr Ala Tyr Asp Lys Arg			
385	390	395	400
Ala Asn Pro Gln Val Gly Val Ala Phe Pro His Ile Lys His Asn Tyr			
405	410	415	
Glu Cys Leu Val Tyr Val Gln Leu Pro Phe Met Glu Asp Leu Arg Gln			
420	425	430	
Tyr Met Phe Ser Ser Leu Lys Asn Ser Lys Lys Tyr Ala Pro Thr Glu			
435	440	445	
Ala Gln Leu Asn Ala Val Asp Ala Leu Ile Asp Ser Met Ser Leu Ala			

450

455

460

Lys Lys Asp Glu Lys Thr Asp Thr Leu Glu Asp Leu Phe Pro Thr Thr
465 470 475 480

Lys Ile Pro Asn Pro Arg Phe Gln Arg Leu Phe Gln Val Arg Glu Glu
485 490 495

Gly

<210> 38

<211> 521

<212> PRT

<213> Homo sapiens

<400> 38

Met Val Arg Ser Gly Asn Lys Ala Ala Val Val Leu Cys Met Asp Val
1 5 10 15

Gly Phe Thr Met Ser Asn Ser Ile Pro Gly Ile Glu Ser Pro Phe Glu
20 25 30

Gln Ala Lys Lys Val Ile Thr Met Phe Val Gln Arg Gln Val Phe Ala
35 40 45

Glu Asn Lys Asp Glu Ile Ala Leu Val Leu Phe Gly Thr Asp Gly Thr
50 55 60

Asp Asn Pro Leu Ser Gly Gly Asp Gln Tyr Gln Asn Ile Thr Val His
65 70 75 80

Arg His Leu Met Leu Pro Asp Phe Asp Leu Leu Glu Asp Ile Glu Ser
85 90 95

Lys Ile Gln Pro Gly Ser Gln Gln Ala Asp Phe Leu Asp Ala Leu Ile
100 105 110

Val Ser Met Asp Val Ile Gln His Glu Thr Ile Gly Lys Lys Phe Glu
115 120 125

Lys Arg His Ile Glu Ile Phe Thr Asp Leu Ser Ser Arg Phe Ser Lys
130 135 140

Ser Gln Leu Asp Ile Ile His Ser Leu Lys Lys Cys Asp Ile Ser
145 150 155 160

Leu Gln Phe Phe Leu Pro Phe Ser Leu Gly Lys Glu Asp Gly Ser Gly
165 170 175

Asp Arg Gly Asp Gly Pro Phe Arg Leu Gly Gly His Gly Pro Ser Phe
180 185 190

Pro Leu Lys Gly Ile Thr Glu Gln Gln Lys Glu Gly Leu Glu Ile Val
195 200 205

Lys Met Val Met Ile Ser Leu Glu Gly Glu Asp Gly Leu Asp Glu Ile
 210 215 220
 Tyr Ser Phe Ser Glu Ser Leu Arg Lys Leu Cys Val Phe Lys Lys Ile
 225 230 235 240
 Glu Arg His Ser Ile His Trp Pro Cys Arg Leu Thr Ile Gly Ser Asn
 245 250 255
 Leu Ser Ile Arg Ile Ala Ala Tyr Lys Ser Ile Leu Gln Glu Arg Val
 260 265 270
 Lys Lys Thr Trp Thr Val Val Asp Ala Lys Thr Leu Lys Lys Glu Asp
 275 280 285
 Ile Gln Lys Glu Thr Val Tyr Cys Leu Asn Asp Asp Asp Glu Thr Glu
 290 295 300
 Leu Asn Pro Pro Ala Glu Val Thr Thr Lys Ser Gln Ile Pro Leu Ser
 305 310 315 320
 Lys Ile Lys Thr Leu Phe Pro Leu Ile Glu Ala Lys Lys Lys Asp Gln
 325 330 335
 Val Thr Ala Gln Glu Ile Phe Gln Asp Asn His Glu Asp Gly Pro Thr
 340 345 350
 Ala Lys Lys Leu Lys Thr Glu Gln Gly Gly Ala His Phe Ser Val Ser
 355 360 365
 Ser Leu Ala Glu Gly Ser Val Thr Ser Val Gly Ser Val Asn Pro Ala
 370 375 380
 Glu Asn Phe Arg Val Leu Val Lys Gln Lys Lys Ala Ser Phe Glu Glu
 385 390 395 400
 Ala Ser Asn Gln Leu Ile Asn His Ile Glu Gln Phe Leu Asp Thr Asn
 405 410 415
 Glu Thr Pro Tyr Phe Met Lys Ser Ile Asp Cys Ile Arg Ala Phe Arg
 420 425 430
 Glu Glu Ala Ile Lys Phe Ser Glu Glu Gln Arg Phe Asn Asn Phe Leu
 435 440 445
 Lys Ala Leu Gln Glu Lys Val Glu Ile Lys Gln Leu Asn His Phe Trp
 450 455 460
 Glu Ile Val Val Gln Asp Gly Ile Thr Leu Ile Thr Lys Glu Glu Ala
 465 470 475 480
 Ser Gly Ser Ser Val Thr Ala Glu Glu Ala Lys Lys Phe Leu Ala Pro
 485 490 495
 Lys Asp Lys Pro Ser Gly Asp Thr Ala Ala Val Phe Glu Glu Gly Gly
 500 505 510

Asp Val Asp Asp Leu Leu Asp Met Ile
515 520

<210> 39
<211> 437
<212> PRT
<213> Homo sapiens

<400> 39
Met Gly Cys Gly Cys Ser Ser His Pro Glu Asp Asp Trp Met Glu Asn
1 5 10 15

Ile Asp Val Cys Glu Asn Cys His Tyr Pro Ile Val Pro Leu Asp Gly
20 25 30

Lys Gly Thr Leu Leu Ile Arg Asn Gly Ser Glu Val Arg Asp Pro Leu
35 40 45

Val Thr Tyr Glu Gly Ser Asn Pro Pro Ala Ser Pro Leu Gln Asp Asn
50 55 60

Leu Val Ile Ala Leu His Ser Tyr Glu Pro Ser His Asp Gly Asp Leu
65 70 75 80

Gly Phe Glu Lys Gly Glu Gln Leu Arg Ile Leu Glu Gln Ser Gly Glu
85 90 95

Trp Trp Lys Ala Gln Ser Leu Thr Thr Gly Gln Glu Gly Phe Ile Pro
100 105 110

Phe Asn Phe Val Ala Lys Ala Asn Ser Leu Glu Pro Glu Pro Trp Phe
115 120 125

Phe Lys Asn Leu Ser Arg Lys Asp Ala Glu Arg Gln Leu Leu Ala Pro
130 135 140

Gly Asn Thr His Gly Ser Phe Leu Ile Arg Glu Ser Glu Ser Thr Ala
145 150 155 160

Gly Ser Phe Ser Leu Ser Val Arg Asp Phe Asp Gln Asn Gln Gly Glu
165 170 175

Val Val Lys His Tyr Lys Ile Arg Asn Leu Asp Asn Gly Gly Phe Tyr
180 185 190

Ile Ser Pro Arg Ile Thr Phe Pro Gly Leu His Glu Leu Val Arg His
195 200 205

Tyr Thr Asn Ala Ser Asp Gly Leu Cys Thr Arg Leu Ser Arg Pro Cys
210 215 220

Gln Thr Gln Lys Pro Gln Lys Pro Trp Trp Glu Asp Glu Trp Glu Val
225 230 235 240

Pro Arg Glu Thr Leu Lys Leu Val Glu Arg Leu Gly Ala Gly Gln Phe
 245 250 255
 Gly Glu Val Trp Met Gly Tyr Tyr Asn Gly His Thr Lys Val Ala Val
 260 265 270
 Lys Ser Leu Lys Gln Gly Ser Met Ser Pro Asp Ala Phe Leu Ala Glu
 275 280 285
 Ala Asn Leu Met Lys Gln Leu Gln His Gln Arg Leu Val Arg Leu Tyr
 290 295 300
 Ala Val Val Thr Gln Glu Pro Ile Tyr Ile Ile Thr Glu Tyr Met Glu
 305 310 315 320
 Asn Gly Ser Leu Val Asp Phe Leu Lys Thr Pro Ser Gly Ile Lys Leu
 325 330 335
 Thr Ile Asn Lys Leu Leu Asp Met Ala Ala Gln Ile Ala Glu Gly Met
 340 345 350
 Ala Phe Ile Glu Glu Arg Asn Tyr Ile His Arg Asp Leu Arg Ala Ala
 355 360 365
 Asn Ile Leu Val Ser Asp Thr Leu Ser Cys Lys Ile Ala Asp Phe Gly
 370 375 380
 Leu Ala Arg Leu Ile Glu Asp Ile His His Gln Val Arg Cys Val Val
 385 390 395 400
 Phe Trp Asp Pro Ala Asp Gly Asn Cys His Pro Arg Pro His Pro Leu
 405 410 415
 Pro Arg Asp Asp Gln Pro Gly Gly Asp Ser Glu Pro Gly Ala Arg Leu
 420 425 430
 Pro His Gly Ala Pro
 435

<210> 40
 <211> 567
 <212> PRT
 <213> Homo sapiens

<400> 40
 Met Gly Cys Gly Cys Ser Ser His Pro Glu Asp Asp Trp Met Glu Asn
 1 5 10 15
 Ile Asp Val Cys Glu Asn Cys His Tyr Pro Ile Val Pro Leu Asp Gly
 20 25 30
 Lys Gly Thr Leu Leu Ile Arg Asn Gly Ser Glu Val Arg Asp Pro Leu
 35 40 45
 Val Thr Tyr Glu Gly Ser Asn Pro Pro Ala Ser Pro Leu Gln Gly Asp

50	55	60
Pro Arg Gln Gln Gly Leu Lys Asp Lys Ala Cys Gly Ser Leu Ala Val		
65	70	75
Gly Phe His Leu Ser Pro Thr Tyr Phe Leu Pro Gly Leu Ala Phe Leu		
85	90	95
Val Pro His Pro Val Thr Pro Gly Phe Leu Pro Ile Pro Ala Arg Phe		
100	105	110
Ser Leu Thr Pro Leu Val Phe Thr Asp Asn Leu Val Ile Ala Leu His		
115	120	125
Ser Tyr Glu Pro Ser His Asp Gly Asp Leu Gly Phe Glu Lys Gly Glu		
130	135	140
Gln Leu Arg Ile Leu Glu Gln Ser Gly Glu Trp Trp Lys Ala Gln Ser		
145	150	155
Leu Thr Thr Gly Gln Glu Gly Phe Ile Pro Phe Asn Phe Val Ala Lys		
165	170	175
Ala Asn Ser Leu Glu Pro Glu Pro Trp Phe Phe Lys Asn Leu Ser Arg		
180	185	190
Lys Asp Ala Glu Arg Gln Leu Leu Ala Pro Gly Asn Thr His Gly Ser		
195	200	205
Phe Leu Ile Arg Glu Ser Glu Ser Thr Ala Gly Ser Phe Ser Leu Ser		
210	215	220
Val Arg Asp Phe Asp Gln Asn Gln Gly Glu Val Val Lys His Tyr Lys		
225	230	235
240		
Ile Arg Asn Leu Asp Asn Gly Gly Phe Tyr Ile Ser Pro Arg Ile Thr		
245	250	255
Phe Pro Gly Leu His Glu Leu Val Arg His Tyr Thr Asn Ala Ser Asp		
260	265	270
Gly Leu Cys Thr Arg Leu Ser Arg Pro Cys Gln Thr Gln Lys Pro Gln		
275	280	285
Lys Pro Trp Trp Glu Asp Glu Trp Glu Val Pro Arg Glu Thr Leu Lys		
290	295	300
320		
Leu Val Glu Arg Leu Gly Ala Gly Gln Phe Gly Glu Val Trp Met Gly		
305	310	315
335		
Tyr Tyr Asn Gly His Thr Lys Val Ala Val Lys Ser Leu Lys Gln Gly		
325	330	335
Ser Met Ser Pro Asp Ala Phe Leu Ala Glu Ala Asn Leu Met Lys Gln		
340	345	350
Leu Gln His Gln Arg Leu Val Arg Leu Tyr Ala Val Val Thr Gln Glu		

355	360	365
Pro Ile Tyr Ile Ile Thr Glu Tyr Met Glu Asn Gly Ser Leu Val Asp		
370	375	380
Phe Leu Lys Thr Pro Ser Gly Ile Lys Leu Thr Ile Asn Lys Leu Leu		
385	390	395
Asp Met Ala Ala Gln Ile Ala Glu Gly Met Ala Phe Ile Glu Glu Arg		
405	410	415
Asn Tyr Ile His Arg Asp Leu Arg Ala Ala Asn Ile Leu Val Ser Asp		
420	425	430
Thr Leu Ser Cys Lys Ile Ala Asp Phe Gly Leu Ala Arg Leu Ile Glu		
435	440	445
Asp Asn Glu Tyr Thr Ala Arg Glu Gly Ala Lys Phe Pro Ile Lys Trp		
450	455	460
Thr Ala Pro Glu Ala Ile Asn Tyr Gly Thr Phe Thr Ile Lys Ser Asp		
465	470	475
Val Trp Ser Phe Gly Ile Leu Leu Thr Glu Ile Val Thr His Gly Arg		
485	490	495
Ile Pro Tyr Pro Gly Met Thr Asn Pro Glu Val Ile Gln Asn Leu Glu		
500	505	510
Arg Gly Tyr Arg Met Val Arg Pro Asp Asn Cys Pro Glu Glu Leu Tyr		
515	520	525
Gln Leu Met Arg Leu Cys Trp Lys Glu Arg Pro Glu Asp Arg Pro Thr		
530	535	540
Phe Asp Tyr Leu Arg Ser Val Leu Glu Asp Phe Phe Thr Ala Thr Glu		
545	550	555
Gly Gln Tyr Gln Pro Gln Pro		
565		

<210> 41
 <211> 192
 <212> PRT
 <213> Homo sapiens

<400> 41
 Met Arg Ile Ala Val Ile Cys Phe Cys Leu Leu Gly Ile Thr Cys Ala
 1 5 10 15

Ile Pro Val Lys Gln Ala Asp Ser Gly Ser Ser Glu Glu Lys Gln Leu
 20 25 30

Tyr Asn Lys Tyr Pro Asp Ala Val Ala Thr Trp Leu Asn Pro Asp Pro
 35 40 45

Ser Gln Lys Gln Asn Leu Leu Ala Pro Gln Asn Ala Val Ser Ser Glu
 50 55 60

Glu Thr Asn Asp Phe Lys Gln Glu Thr Leu Pro Ser Lys Ser Asn Glu
 65 70 75 80

Ser His Asp His Met Asp Asp Met Asp Asp Glu Asp Asp Asp Asp His
 85 90 95

Val Asp Ser Gln Asp Ser Ile Asp Ser Asn Asp Ser Asp Asp Val Asp
 100 105 110

Asp Thr Asp Asp Ser His Gln Ser Asp Glu Ser His His Ser Asp Glu
 115 120 125

Ser Asp Glu Leu Val Thr Asp Phe Pro Thr Asp Leu Pro Ala Thr Glu
 130 135 140

Val Phe Thr Pro Val Val Pro Thr Val Asp Thr Tyr Asp Gly Arg Gly
 145 150 155 160

Asp Ser Val Val Tyr Gly Leu Arg Ser Lys Ser Lys Lys Phe Arg Arg
 165 170 175

Pro Asp Ile Gln Val Asn Pro Leu Thr Asp Thr Pro Asp Gly Ser Asp
 180 185 190

<210> 42
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 42
 Met Glu Leu Gly Leu Pro Gln Val Pro Pro Ala Val Asp Ala Glu Leu
 1 5 10 15

Leu Cys Arg Phe Val Asp Arg Gly Leu Pro Tyr Pro Asp Val Ser Ser
 20 25 30

Ala Asn Thr Pro Pro Ala Val Gly Leu Ser Pro Pro Thr Pro Tyr Phe
 35 40 45

Glu Pro Cys Ala Leu Pro Ser Pro His Arg His Gln Leu Ala Glu Ala
 50 55 60

Ile Pro Cys Thr Leu Ala Val Ser Asn Pro His Thr Asp Ala Trp Lys
 65 70 75 80

Ser His Gly Leu Val Glu Val Ala Ser Tyr Cys Glu Glu Ser Arg Gly
 85 90 95

Asn Asn Gln Trp Val Pro Tyr Ile Ser Leu Gln Glu Arg
100 105

<210> 43
<211> 331
<212> PRT
<213> Homo sapiens

<400> 43
Met Arg Ala Arg Pro Gln Val Cys Glu Ala Leu Leu Phe Ala Leu Ala
1 5 10 15

Leu Gln Thr Gly Val Cys Tyr Gly Ile Lys Trp Leu Ala Leu Ser Lys
20 25 30

Thr Pro Ser Ala Leu Ala Leu Asn Gln Thr Gln His Cys Lys Gln Leu
35 40 45

Glu Gly Leu Val Ser Ala Gln Val Gln Leu Cys Arg Ser Asn Leu Glu
50 55 60

Leu Met His Thr Val Val His Ala Ala Arg Glu Val Met Lys Ala Cys
65 70 75 80

Arg Arg Ala Phe Ala Asp Met Arg Trp Asn Cys Ser Ser Ile Glu Leu
85 90 95

Ala Pro Asn Tyr Leu Leu Asp Leu Glu Arg Gly Thr Arg Glu Ser Ala
100 105 110

Phe Val Tyr Ala Leu Ser Ala Ala Ile Ser His Ala Ile Ala Arg
115 120 125

Ala Cys Thr Ser Gly Asp Leu Pro Gly Cys Ser Cys Gly Pro Val Pro
130 135 140

Gly Glu Pro Pro Gly Pro Gly Asn Arg Trp Gly Arg Cys Ala Asp Asn
145 150 155 160

Leu Ser Tyr Gly Leu Leu Met Gly Ala Lys Phe Ser Asp Ala Pro Met
165 170 175

Lys Val Lys Lys Thr Gly Ser Gln Ala Asn Lys Leu Met Arg Leu His
180 185 190

Asn Ser Glu Val Gly Arg Gln Ala Leu Arg Ala Ser Leu Glu Met Lys
195 200 205

Cys Lys Cys His Gly Val Ser Gly Ser Cys Ser Ile Arg Thr Cys Trp
210 215 220

Lys Gly Leu Gln Glu Leu Gln Asp Val Ala Ala Asp Leu Lys Thr Arg
225 230 235 240

Tyr Leu Ser Ala Thr Lys Val Val His Arg Pro Met Gly Thr Arg Lys

245	250	255
His Leu Val Pro Lys Asp Leu Asp Ile Arg Pro Val Lys Asp Ser Glu		
260	265	270
Leu Val Tyr Leu Gln Ser Ser Pro Asp Phe Cys Met Lys Asn Glu Lys		
275	280	285
Val Gly Ser His Gly Thr Gln Asp Arg Gln Cys Asn Lys Thr Ser Asn		
290	295	300
Gly Ser Asp Ser Cys Asp Leu Met Cys Cys Tyr Val Thr Cys Arg Arg		
305	310	315
Cys Glu Arg Thr Val Glu Arg Tyr Val Cys Lys		
325	330	

<210> 44
 <211> 237
 <212> PRT
 <213> Homo sapiens

<400> 44		
Met Arg Ala Arg Pro Gln Val Cys Glu Ala Leu Leu Phe Ala Leu Ala		
1	5	10
		15
Leu Gln Thr Gly Val Cys Tyr Gly Ile Lys Trp Leu Ala Leu Ser Lys		
20	25	30
Thr Pro Ser Ala Leu Ala Leu Asn Gln Thr Gln His Cys Lys Gln Leu		
35	40	45
Glu Gly Leu Val Ser Ala Gln Val Gln Leu Cys Arg Ser Asn Leu Glu		
50	55	60
Leu Met His Thr Val Val His Ala Ala Arg Glu Val Met Lys Ala Cys		
65	70	75
		80
Arg Arg Ala Phe Ala Asp Met Arg Trp Asn Cys Ser Ser Ile Glu Leu		
85	90	95
Ala Pro Asn Tyr Leu Leu Asp Leu Glu Arg Gly Thr Arg Glu Ser Ala		
100	105	110
Phe Val Tyr Ala Ala Ala Asp Leu Lys Thr Arg Tyr Leu Ser Ala Thr		
115	120	125
Lys Val Val His Arg Pro Met Gly Thr Arg Lys His Leu Val Pro Lys		
130	135	140
Asp Leu Asp Ile Arg Pro Val Lys Asp Ser Glu Leu Val Tyr Leu Gln		
145	150	155
		160
Ser Ser Pro Asp Phe Cys Met Lys Asn Glu Lys Val Gly Ser His Gly		
165	170	175

Thr	Gln	Asp	Arg	Gln	Cys	Asn	Lys	Thr	Ser	Asn	Gly	Ser	Asp	Ser	Cys
180						185							190		
Asp	Leu	Met	Cys	Cys	Gly	Arg	Gly	Tyr	Asn	Pro	Tyr	Thr	Asp	Arg	Val
195						200						205			
Val	Glu	Arg	Cys	His	Cys	Lys	Tyr	His	Trp	Cys	Cys	Tyr	Val	Thr	Cys
210						215					220				
Arg	Arg	Cys	Glu	Arg	Thr	Val	Glu	Arg	Tyr	Val	Cys	Lys			
225			230								235				

<210> 45
 <211> 615
 <212> PRT
 <213> Homo sapiens

<400> 45															
Met	Ser	Pro	Phe	Leu	Arg	Ile	Gly	Leu	Ser	Asn	Phe	Asp	Cys	Gly	Ser
1									10					15	
Cys	Gln	Ser	Cys	Gln	Gly	Glu	Ala	Val	Asn	Pro	Tyr	Cys	Ala	Val	Leu
									25					30	
Val	Lys	Glu	Tyr	Val	Glu	Ser	Glu	Asn	Gly	Gln	Met	Tyr	Ile	Gln	Lys
									40					45	
Lys	Pro	Thr	Met	Tyr	Pro	Pro	Trp	Asp	Ser	Thr	Phe	Asp	Ala	His	Ile
									55					60	
Asn	Lys	Gly	Arg	Val	Met	Gln	Ile	Ile	Val	Lys	Gly	Lys	Asn	Val	Asp
65						70				75					80
Leu	Ile	Ser	Glu	Thr	Thr	Val	Glu	Leu	Tyr	Ser	Leu	Ala	Glu	Arg	Cys
						85			90					95	
Arg	Lys	Asn	Asn	Gly	Lys	Thr	Glu	Ile	Trp	Leu	Glu	Leu	Lys	Pro	Gln
									105					110	
Gly	Arg	Met	Leu	Met	Asn	Ala	Arg	Tyr	Phe	Leu	Glu	Met	Ser	Asp	Thr
									115			120		125	
Lys	Asp	Met	Asn	Glu	Phe	Glu	Thr	Glu	Gly	Phe	Phe	Ala	Leu	His	Gln
									130			135		140	
Arg	Arg	Gly	Ala	Ile	Lys	Gln	Ala	Lys	Val	His	His	Val	Lys	Cys	His
145										150			155		160
Glu	Phe	Thr	Ala	Thr	Phe	Phe	Pro	Gln	Pro	Thr	Phe	Cys	Ser	Val	Cys
									165			170		175	
His	Glu	Phe	Val	Trp	Gly	Leu	Asn	Lys	Gln	Gly	Tyr	Gln	Cys	Arg	Gln
									180			185		190	

Cys Asn Ala Ala Ile His Lys Lys Cys Ile Asp Lys Val Ile Ala Lys
 195 200 205
 Cys Thr Gly Ser Ala Ile Asn Ser Arg Glu Thr Met Phe His Lys Glu
 210 215 220
 Arg Phe Lys Ile Asp Met Pro His Arg Phe Lys Val Tyr Asn Tyr Lys
 225 230 235 240
 Ser Pro Thr Phe Cys Glu His Cys Gly Thr Leu Leu Trp Gly Leu Ala
 245 250 255
 Arg Gln Gly Leu Lys Cys Asp Ala Cys Gly Met Asn Val His His Arg
 260 265 270
 Cys Gln Thr Lys Val Ala Asn Leu Cys Gly Ile Asn Gln Lys Leu Met
 275 280 285
 Ala Glu Ala Leu Ala Met Ile Glu Ser Thr Gln Gln Ala Arg Cys Leu
 290 295 300
 Arg Asp Thr Glu Gln Ile Phe Arg Glu Gly Pro Val Glu Ile Gly Leu
 305 310 315 320
 Pro Cys Ser Ile Lys Asn Glu Ala Arg Pro Pro Cys Leu Pro Thr Pro
 325 330 335
 Gly Lys Arg Glu Pro Gln Gly Ile Ser Trp Glu Ser Pro Leu Asp Glu
 340 345 350
 Val Asp Lys Met Cys His Leu Pro Glu Pro Glu Leu Asn Lys Glu Arg
 355 360 365
 Pro Ser Leu Gln Ile Lys Leu Lys Ile Glu Asp Phe Ile Leu His Lys
 370 375 380
 Met Leu Gly Lys Gly Ser Phe Gly Lys Val Phe Leu Ala Glu Phe Lys
 385 390 395 400
 Lys Thr Asn Gln Phe Phe Ala Ile Lys Ala Leu Lys Lys Asp Val Val
 405 410 415
 Leu Met Asp Asp Asp Val Glu Cys Thr Met Val Glu Lys Arg Val Leu
 420 425 430
 Ser Leu Ala Trp Glu His Pro Phe Leu Thr His Met Phe Cys Thr Phe
 435 440 445
 Gln Thr Lys Glu Asn Leu Phe Phe Val Met Glu Tyr Leu Asn Gly Gly
 450 455 460
 Asp Leu Met Tyr His Ile Gln Ser Cys His Lys Phe Asp Leu Ser Arg
 465 470 475 480
 Ala Thr Phe Tyr Ala Ala Glu Ile Ile Leu Gly Leu Gln Phe Leu His
 485 490 495

Ser Lys Gly Ile Val Tyr Arg Asp Leu Lys Leu Asp Asn Ile Leu Leu
 500 505 510
 Asp Lys Asp Gly His Ile Lys Ile Ala Asp Phe Gly Met Cys Lys Glu
 515 520 525
 Asn Met Leu Gly Asp Ala Lys Thr Asn Thr Phe Cys Gly Thr Pro Asp
 530 535 540
 Tyr Ile Ala Pro Glu Ile Leu Leu Gly Gln Lys Tyr Asn His Ser Val
 545 550 555 560
 Asp Trp Trp Ser Phe Gly Val Leu Leu Tyr Glu Met Leu Ile Gly Gln
 565 570 575
 Ser Pro Phe His Gly Gln Asp Glu Glu Glu Leu Phe His Ser Ile Arg
 580 585 590
 Met Asp Asn Pro Phe Tyr Pro Arg Trp Leu Glu Lys Glu Ala Lys Asp
 595 600 605
 Leu Leu Val Lys Val Arg Ser
 610 615

<210> 46
 <211> 292
 <212> PRT
 <213> Homo sapiens

<400> 46
 Met Pro Ile Thr Arg Met Arg Met Arg Pro Trp Leu Glu Met Gln Ile
 1 5 10 15
 Asn Ser Asn Gln Ile Pro Gly Leu Ile Trp Ile Asn Lys Glu Glu Met
 20 25 30
 Ile Phe Gln Ile Pro Trp Lys His Ala Ala Lys His Gly Trp Asp Ile
 35 40 45
 Asn Lys Asp Ala Cys Leu Phe Arg Ser Trp Ala Ile His Thr Gly Arg
 50 55 60
 Tyr Lys Ala Gly Glu Lys Glu Pro Asp Pro Lys Thr Trp Lys Ala Asn
 65 70 75 80
 Phe Arg Cys Ala Met Asn Ser Leu Pro Asp Ile Glu Glu Val Lys Asp
 85 90 95
 Gln Ser Arg Asn Lys Gly Ser Ser Ala Val Arg Val Tyr Arg Met Leu
 100 105 110
 Pro Pro Leu Thr Lys Asn Gln Arg Lys Glu Arg Lys Ser Lys Ser Ser
 115 120 125
 Arg Asp Ala Lys Ser Lys Ala Lys Arg Lys Ser Cys Gly Asp Ser Ser

130	135	140	
Pro Asp Thr Phe Ser Asp Gly Leu Ser Ser Ser Thr Leu Pro Asp Asp			
145	150	155	160
His Ser Ser Tyr Thr Val Pro Gly Tyr Met Gln Asp Leu Glu Val Glu			
165	170	175	
Gln Ala Leu Thr Pro Ala Leu Ser Pro Cys Ala Val Ser Ser Thr Leu			
180	185	190	
Pro Asp Trp His Ile Pro Val Glu Val Val Pro Asp Ser Thr Ser Asp			
195	200	205	
Leu Tyr Asn Phe Gln Val Ser Pro Met Pro Ser Thr Ser Glu Ala Thr			
210	215	220	
Thr Asp Glu Asp Glu Glu Gly Lys Leu Pro Glu Asp Ile Met Lys Leu			
225	230	235	240
Leu Glu Gln Ser Glu Trp Gln Pro Thr Asn Val Asp Gly Lys Gly Tyr			
245	250	255	
Leu Leu Asn Glu Pro Gly Val Gln Pro Thr Ser Val Tyr Gly Asp Phe			
260	265	270	
Ser Cys Lys Glu Glu Pro Glu Ile Asp Ser Pro Gly Gly Lys Lys Ala			
275	280	285	
Pro Gly Ser Leu			
290			

<210> 47
 <211> 702
 <212> PRT
 <213> Homo sapiens

<400> 47			
Met Trp Ser Trp Lys Cys Leu Leu Phe Trp Ala Val Leu Val Thr Ala			
1	5	10	15
Thr Leu Cys Thr Ala Arg Pro Ser Pro Thr Leu Pro Glu Gln Ala Gln			
20	25	30	
Pro Trp Gly Ala Pro Val Glu Val Glu Ser Phe Leu Val His Pro Gly			
35	40	45	
Asp Leu Leu Gln Leu Arg Cys Arg Leu Arg Asp Asp Val Gln Ser Ile			
50	55	60	
Asn Trp Leu Arg Asp Gly Val Gln Leu Ala Glu Ser Asn Arg Thr Arg			
65	70	75	80
Ile Thr Gly Glu Glu Val Glu Val Gln Asp Ser Val Pro Ala Asp Ser			
85	90	95	

Gly Leu Tyr Ala Cys Val Thr Ser Ser Pro Ser Gly Ser Asp Thr Thr
 100 105 110
 Tyr Phe Ser Val Asn Val Ser Asp Ala Leu Pro Ser Ser Glu Asp Asp
 115 120 125
 Asp Asp Asp Asp Asp Ser Ser Ser Glu Glu Lys Glu Thr Asp Asn Thr
 130 135 140
 Lys Pro Asn Arg Met Pro Val Ala Pro Tyr Trp Thr Ser Pro Glu Lys
 145 150 155 160
 Met Glu Lys Lys Leu His Ala Val Pro Ala Ala Lys Thr Val Lys Phe
 165 170 175
 Lys Cys Pro Ser Ser Gly Thr Pro Asn Pro Thr Leu Arg Trp Leu Lys
 180 185 190
 Asn Gly Lys Glu Phe Lys Pro Asp His Arg Ile Gly Gly Tyr Lys Val
 195 200 205
 Arg Tyr Ala Thr Trp Ser Ile Ile Met Asp Ser Val Val Pro Ser Asp
 210 215 220
 Lys Gly Asn Tyr Thr Cys Ile Val Glu Asn Glu Tyr Gly Ser Ile Asn
 225 230 235 240
 His Thr Tyr Gln Leu Asp Val Val Glu Arg Ser Pro His Arg Pro Ile
 245 250 255
 Leu Gln Ala Gly Leu Pro Ala Asn Lys Thr Val Ala Leu Gly Ser Asn
 260 265 270
 Val Glu Phe Met Cys Lys Val Tyr Ser Asp Pro Gln Pro His Ile Gln
 275 280 285
 Trp Leu Lys His Ile Glu Val Asn Gly Ser Lys Ile Gly Pro Asp Asn
 290 295 300
 Leu Pro Tyr Val Gln Ile Leu Lys Thr Ala Gly Val Asn Thr Thr Asp
 305 310 315 320
 Lys Glu Met Glu Val Leu His Leu Arg Asn Val Ser Phe Glu Asp Ala
 325 330 335
 Gly Glu Tyr Thr Cys Leu Ala Gly Asn Ser Ile Gly Leu Ser His His
 340 345 350
 Ser Ala Trp Leu Thr Val Leu Glu Ala Leu Glu Glu Arg Pro Ala Val
 355 360 365
 Met Thr Ser Pro Leu Tyr Leu Glu Ile Ile Ile Tyr Cys Thr Gly Ala
 370 375 380
 Phe Leu Ile Ser Cys Met Val Gly Ser Val Ile Val Tyr Lys Met Lys
 385 390 395 400

Ser Gly Thr Lys Lys Ser Asp Phe His Ser Gln Met Ala Val His Lys
 405 410 415

 Leu Ala Lys Ser Ile Pro Leu Arg Arg Gln Val Thr Val Ser Ala Asp
 420 425 430

 Ser Ser Ala Ser Met Asn Ser Gly Val Leu Leu Val Arg Pro Ser Arg
 435 440 445

 Leu Ser Ser Ser Gly Thr Pro Met Leu Ala Gly Val Ser Glu Tyr Glu
 450 455 460

 Leu Pro Glu Asp Pro Arg Trp Glu Leu Pro Arg Asp Arg Leu Val Leu
 465 470 480

 Gly Lys Pro Leu Gly Glu Gly Cys Phe Gly Gln Val Val Leu Ala Glu
 485 490 495

 Ala Ile Gly Leu Asp Lys Asp Lys Pro Asn Arg Val Thr Lys Val Ala
 500 505 510

 Val Lys Met Leu Lys Ser Asp Ala Thr Glu Lys Asp Leu Ser Asp Leu
 515 520 525

 Ile Ser Glu Met Glu Met Met Lys Met Ile Gly Lys His Lys Asn Ile
 530 535 540

 Ile Asn Leu Leu Gly Ala Cys Thr Gln Asp Gly Pro Leu Tyr Val Ile
 545 550 560

 Val Glu Tyr Ala Ser Lys Gly Asn Leu Arg Glu Tyr Leu Gln Ala Arg
 565 570 575

 Arg Pro Pro Gly Leu Glu Tyr Cys Tyr Asn Pro Ser His Asn Pro Glu
 580 585 590

 Glu Gln Leu Ser Ser Lys Asp Leu Val Ser Cys Ala Tyr Gln Val Ala
 595 600 605

 Arg Gly Met Glu Tyr Leu Ala Ser Lys Lys Cys Ile His Arg Asp Leu
 610 615 620

 Ala Ala Arg Asn Val Leu Val Thr Glu Asp Asn Val Met Lys Ile Ala
 625 630 640

 Asp Phe Gly Leu Ala Arg Asp Ile His His Ile Asp Tyr Tyr Lys Lys
 645 650 655

 Thr Thr Asn Gly Arg Leu Pro Val Lys Trp Met Ala Pro Glu Ala Leu
 660 665 670

 Phe Asp Arg Ile Tyr Thr His Gln Ser Asp Val Trp Ser Phe Gly Val
 675 680 685

 Pro His Thr Pro Val Cys Leu Trp Arg Asn Phe Ser Ser Cys
 690 695 700

<210> 48
<211> 295
<212> PRT
<213> Homo sapiens

<400> 48
Met Pro Lys Arg Gly Lys Lys Gly Ala Val Ala Glu Asp Gly Asp Glu
1 5 10 15
Leu Arg Thr Glu Pro Glu Ala Lys Lys Ser Lys Thr Ala Ala Lys Lys
20 25 30
Asn Asp Lys Glu Ala Ala Gly Glu Gly Pro Ala Leu Tyr Glu Asp Pro
35 40 45
Pro Asp Gln Lys Thr Ser Pro Ser Gly Lys Pro Ala Thr Leu Lys Ile
50 55 60
Cys Ser Trp Asn Val Asp Gly Leu Arg Ala Trp Ile Lys Lys Lys Gly
65 70 75 80
Leu Asp Trp Val Lys Glu Ala Pro Asp Ile Leu Cys Leu Gln Glu
85 90 95
Thr Lys Cys Ser Glu Asn Lys Leu Pro Ala Glu Leu Gln Glu Leu Pro
100 105 110
Gly Leu Ser His Gln Tyr Trp Ser Ala Pro Ser Asp Lys Glu Gly Tyr
115 120 125
Ser Gly Val Gly Leu Leu Ser Arg Gln Cys Pro Leu Lys Val Ser Tyr
130 135 140
Gly Ile Ala Tyr Val Pro Asn Ala Gly Arg Gly Leu Val Arg Leu Glu
145 150 155 160
Tyr Arg Gln Arg Trp Asp Glu Ala Phe Arg Lys Phe Leu Lys Gly Leu
165 170 175
Ala Ser Arg Lys Pro Leu Val Leu Cys Gly Asp Leu Asn Val Ala His
180 185 190
Glu Glu Ile Asp Leu Arg Asn Pro Lys Gly Asn Lys Lys Asn Ala Gly
195 200 205
Phe Thr Pro Gln Glu Arg Gln Gly Phe Gly Glu Leu Leu Gln Ala Val
210 215 220
Pro Leu Ala Asp Ser Phe Arg His Leu Tyr Pro Asn Thr Pro Tyr Ala
225 230 235 240
Tyr Thr Phe Trp Thr Tyr Met Met Asn Ala Arg Ser Lys Asn Val Gly
245 250 255

Trp Arg Leu Asp Tyr Phe Leu Leu Ser His Ser Leu Leu Pro Ala Leu
260 265 270

Cys Asp Ser Lys Ile Arg Ser Lys Ala Leu Gly Ser Asp His Cys Pro
275 280 285

Ile Thr Leu Tyr Leu Ala Leu
290 295

<210> 49
<211> 342
<212> PRT
<213> Homo sapiens

<400> 49
Met Pro Lys Arg Gly Lys Lys Gly Ala Val Ala Glu Asp Gly Asp Glu
1 5 10 15

Leu Arg Thr Gly Lys Gly Met Lys Ser Ala Leu Leu Pro Arg Asn Cys
20 25 30

Gly Gly Gly Val Cys His Ser Leu Asp Val Arg Glu Pro Glu Ala Lys
35 40 45

Lys Ser Lys Thr Ala Ala Lys Lys Asn Asp Lys Glu Ala Ala Gly Glu
50 55 60

Gly Pro Ala Leu Tyr Glu Asp Pro Pro Asp Gln Lys Thr Ser Pro Ser
65 70 75 80

Gly Lys Pro Ala Thr Leu Lys Ile Cys Ser Trp Asn Val Asp Gly Leu
85 90 95

Arg Ala Trp Ile Lys Lys Lys Gly Leu Asp Trp Val Lys Glu Glu Ala
100 105 110

Pro Asp Ile Leu Cys Leu Gln Glu Thr Lys Cys Ser Glu Asn Lys Leu
115 120 125

Pro Ala Glu Leu Gln Glu Leu Pro Gly Leu Ser His Gln Tyr Trp Ser
130 135 140

Ala Pro Ser Asp Lys Glu Gly Tyr Ser Gly Val Gly Leu Leu Ser Arg
145 150 155 160

Gln Cys Pro Leu Lys Val Ser Tyr Gly Ile Gly Asp Glu Glu His Asp
165 170 175

Gln Glu Gly Arg Val Ile Val Ala Glu Phe Asp Ser Phe Val Leu Val
180 185 190

Thr Ala Tyr Val Pro Asn Ala Gly Arg Gly Leu Val Arg Leu Glu Tyr
195 200 205

Arg Gln Arg Trp Asp Glu Ala Phe Arg Lys Phe Leu Lys Gly Leu Ala

210	215	220
Ser Arg Lys Pro Leu Val Leu Cys Gly Asp Leu Asn Val Ala His Glu		
225	230	235
Glu Ile Asp Leu Arg Asn Pro Lys Gly Asn Lys Lys Asn Ala Gly Phe		
245	250	255
Thr Pro Gln Glu Arg Gln Gly Phe Gly Glu Leu Leu Gln Ala Val Pro		
260	265	270
Leu Ala Asp Ser Phe Arg His Leu Tyr Pro Asn Thr Pro Tyr Ala Tyr		
275	280	285
Thr Phe Trp Thr Tyr Met Met Asn Ala Arg Ser Lys Asn Val Gly Trp		
290	295	300
Arg Leu Asp Tyr Phe Leu Leu Ser His Ser Leu Leu Pro Ala Leu Cys		
305	310	315
Asp Ser Lys Ile Arg Ser Lys Ala Leu Gly Ser Asp His Cys Pro Ile		
325	330	335
Thr Leu Tyr Leu Ala Leu		
340		

<210> 50
 <211> 305
 <212> PRT
 <213> Homo sapiens

<400> 50			
Met Phe Gln Ala Ala Glu Arg Pro Gln Glu Trp Ala Met Glu Gly Pro			
1	5	10	15
Arg Asp Gly Leu Lys Lys Glu Arg Leu Leu Asp Asp Arg His Asp Ser			
20	25	30	
Gly Leu Asp Ser Met Lys Asp Glu Glu Tyr Glu Gln Met Val Lys Glu			
35	40	45	
Leu Gln Glu Ile Arg Leu Glu Pro Gln Glu Val Pro Arg Gly Ser Glu			
50	55	60	
Pro Trp Lys Gln Gln Leu Thr Glu Asp Gly Asp Ser Phe Leu His Leu			
65	70	75	80
Ala Ile Ile His Glu Glu Lys Ala Leu Thr Met Glu Val Ile Arg Gln			
85	90	95	
Val Lys Gly Asp Leu Ala Phe Leu Asn Phe Gln Asn Asn Leu Gln Gln			
100	105	110	
Thr Pro Leu His Leu Ala Val Ile Thr Asn Gln Pro Glu Ile Ala Glu			
115	120	125	

Ala Leu Leu Gly Ala Gly Cys Asp Pro Glu Leu Arg Asp Phe Arg Gly
 130 135 140
 Asn Thr Pro Leu His Leu Ala Cys Glu Gln Gly Cys Leu Ala Ser Val
 145 150 155 160
 Gly Val Leu Thr Gln Ser Cys Thr Thr Pro His Leu His Ser Ile Leu
 165 170 175
 Lys Ala Thr Asn Tyr Asn Gly His Thr Cys Leu His Leu Ala Ser Ile
 180 185 190
 His Gly Tyr Leu Gly Ile Val Glu Leu Leu Val Ser Leu Gly Ala Asp
 195 200 205
 Val Asn Ala Gln Glu Pro Cys Asn Gly Arg Thr Ala Leu His Leu Ala
 210 215 220
 Val Asp Leu Gln Asn Pro Asp Leu Val Ser Leu Leu Lys Cys Gly
 225 230 235 240
 Ala Asp Val Asn Arg Val Thr Tyr Gln Gly Tyr Ser Pro Tyr Gln Leu
 245 250 255
 Thr Trp Gly Arg Pro Ser Thr Arg Ile Gln Gln Gln Leu Gly Gln Leu
 260 265 270
 Thr Leu Glu Asn Leu Gln Met Leu Pro Glu Ser Glu Asp Glu Glu Ser
 275 280 285
 Tyr Asp Thr Glu Ser Glu Phe Thr Glu Phe Thr Glu Asp Glu Val Ser
 290 295 300
 Leu
 305

<210> 51
 <211> 289
 <212> PRT
 <213> Homo sapiens

<400> 51
 Met Phe Gln Ala Ala Glu Arg Pro Gln Glu Trp Ala Met Glu Gly Pro
 1 5 10 15
 Arg Asp Gly Leu Lys Lys Glu Arg Leu Leu Asp Asp Arg His Asp Ser
 20 25 30
 Gly Leu Asp Ser Met Lys Asp Glu Glu Tyr Glu Gln Met Val Lys Glu
 35 40 45
 Leu Gln Glu Ile Arg Leu Glu Pro Gln Glu Val Pro Arg Gly Ser Glu
 50 55 60

Pro Trp Lys Gln Gln Leu Thr Glu Asp Gly Asp Ser Phe Leu His Leu
 65 70 75 80
 Ala Ile Ile His Glu Glu Lys Ala Leu Thr Met Glu Val Ile Arg Gln
 85 90 95
 Val Lys Gly Asp Leu Ala Phe Leu Asn Phe Gln Asn Asn Leu Gln Gln
 100 105 110
 Thr Pro Leu His Leu Ala Val Ile Thr Asn Gln Pro Glu Ile Ala Glu
 115 120 125
 Ala Leu Leu Gly Ala Gly Cys Asp Pro Glu Leu Arg Asp Phe Arg Gly
 130 135 140
 Asn Thr Pro Leu His Leu Ala Cys Glu Gln Gly Cys Leu Ala Ser Val
 145 150 155 160
 Gly Val Leu Thr Gln Ser Cys Thr Thr Pro His Leu His Ser Ile Leu
 165 170 175
 Lys Ala Thr Asn Tyr Asn Gly Gln Glu Pro Cys Asn Gly Arg Thr Ala
 180 185 190
 Leu His Leu Ala Val Asp Leu Gln Asn Pro Asp Leu Val Ser Leu Leu
 195 200 205
 Leu Lys Cys Gly Ala Asp Val Asn Arg Val Thr Tyr Gln Gly Tyr Ser
 210 215 220
 Pro Tyr Gln Leu Thr Trp Gly Arg Pro Ser Thr Arg Ile Gln Gln Gln
 225 230 235 240
 Leu Gly Gln Leu Thr Leu Glu Asn Leu Gln Met Leu Pro Glu Ser Glu
 245 250 255
 Asp Glu Glu Ser Tyr Asp Thr Glu Ser Glu Phe Thr Glu Phe Thr Glu
 260 265 270
 Asp Glu Leu Pro Tyr Asp Asp Cys Val Phe Gly Gly Gln Arg Leu Thr
 275 280 285
 Leu

<210> 52
 <211> 921
 <212> PRT
 <213> Homo sapiens

<400> 52
 Met Ala Gly Ile Phe Tyr Phe Ala Leu Phe Ser Cys Leu Phe Gly Ile
 1 5 10 15
 Cys Asp Ala Val Thr Gly Ser Arg Val Tyr Pro Ala Asn Glu Val Thr

20	25	30
Leu Leu Asp Ser Arg Ser Val Gln Gly Glu Leu Gly Trp Ile Ala Ser		
35	40	45
Pro Leu Glu Gly Gly Trp Glu Glu Val Ser Ile Met Asp Glu Lys Asn		
50	55	60
Thr Pro Ile Arg Thr Tyr Gln Val Cys Asn Val Met Glu Pro Ser Gln		
65	70	75
Asn Asn Trp Leu Arg Thr Asp Trp Ile Thr Arg Glu Gly Ala Gln Arg		
85	90	95
Val Tyr Ile Glu Ile Lys Phe Thr Leu Arg Asp Cys Asn Ser Leu Pro		
100	105	110
Gly Val Met Gly Thr Cys Lys Glu Thr Phe Asn Leu Tyr Tyr Tyr Glu		
115	120	125
Ser Asp Asn Asp Lys Glu Arg Phe Ile Arg Glu Asn Gln Phe Val Lys		
130	135	140
Ile Asp Thr Ile Ala Ala Asp Glu Ser Phe Thr Gln Val Asp Ile Gly		
145	150	155
Asp Arg Ile Met Lys Leu Asn Thr Glu Ile Arg Asp Val Gly Pro Leu		
165	170	175
Ser Lys Lys Gly Phe Tyr Leu Ala Phe Gln Asp Val Gly Ala Cys Ile		
180	185	190
Ala Leu Val Ser Val Arg Val Phe Tyr Lys Lys Cys Pro Leu Thr Val		
195	200	205
Arg Asn Leu Ala Gln Phe Pro Asp Thr Ile Thr Gly Ala Asp Thr Ser		
210	215	220
Ser Leu Val Glu Val Arg Gly Ser Cys Val Asn Asn Ser Glu Glu Lys		
225	230	235
Asp Val Pro Lys Met Tyr Cys Gly Ala Asp Gly Glu Trp Leu Val Pro		
245	250	255
Ile Gly Asn Cys Leu Cys Asn Ala Gly His Glu Glu Arg Ser Gly Glu		
260	265	270
Cys Gln Ala Cys Lys Ile Gly Tyr Tyr Lys Ala Leu Ser Thr Asp Ala		
275	280	285
Thr Cys Ala Lys Cys Pro Pro His Ser Tyr Ser Val Trp Glu Gly Ala		
290	295	300
Thr Ser Cys Thr Cys Asp Arg Gly Phe Phe Arg Ala Asp Asn Asp Ala		
305	310	315
Ala Ser Met Pro Cys Thr Arg Pro Pro Ser Ala Pro Leu Asn Leu Ile		

325	330	335	
Ser Asn Val Asn Glu Thr Ser Val Asn Leu Glu Trp Ser Ser Pro Gln			
340	345	350	
Asn Thr Gly Gly Arg Gln Asp Ile Ser Tyr Asn Val Val Cys Lys Lys			
355	360	365	
Cys Gly Ala Gly Asp Pro Ser Lys Cys Arg Pro Cys Gly Ser Gly Val			
370	375	380	
His Tyr Thr Pro Gln Gln Asn Gly Leu Lys Thr Thr Lys Val Ser Ile			
385	390	395	400
Thr Asp Leu Leu Ala His Thr Asn Tyr Thr Phe Glu Ile Trp Ala Val			
405	410	415	
Asn Gly Val Ser Lys Tyr Asn Pro Asn Pro Asp Gln Ser Val Ser Val			
420	425	430	
Thr Val Thr Thr Asn Gln Ala Ala Pro Ser Ser Ile Ala Leu Val Gln			
435	440	445	
Ala Lys Glu Val Thr Arg Tyr Ser Val Ala Leu Ala Trp Leu Glu Pro			
450	455	460	
Asp Arg Pro Asn Gly Val Ile Leu Glu Tyr Glu Val Lys Tyr Tyr Glu			
465	470	475	480
Lys Asp Gln Asn Glu Arg Ser Tyr Arg Ile Val Arg Thr Ala Ala Arg			
485	490	495	
Asn Thr Asp Ile Lys Gly Leu Asn Pro Leu Thr Ser Tyr Val Phe His			
500	505	510	
Val Arg Ala Arg Thr Ala Ala Gly Tyr Gly Asp Phe Ser Glu Pro Leu			
515	520	525	
Glu Val Thr Thr Asn Thr Val Pro Ser Arg Ile Ile Gly Asp Gly Ala			
530	535	540	
Asn Ser Thr Val Leu Leu Val Ser Val Ser Gly Ser Val Val Leu Val			
545	550	555	560
Val Ile Leu Ile Ala Ala Phe Val Ile Ser Arg Arg Arg Ser Lys Tyr			
565	570	575	
Ser Lys Ala Lys Gln Glu Ala Asp Glu Glu Lys His Leu Asn Gln Gly			
580	585	590	
Val Arg Thr Tyr Val Asp Pro Phe Thr Tyr Glu Asp Pro Asn Gln Ala			
595	600	605	
Val Arg Glu Phe Ala Lys Glu Ile Asp Ala Ser Cys Ile Lys Ile Glu			
610	615	620	
Lys Val Ile Gly Val Gly Glu Phe Gly Glu Val Cys Ser Gly Arg Leu			

625	630	635	640
Lys Val Pro Gly Lys Arg Glu Ile Cys Val Ala Ile Lys Thr Leu Lys			
645	650	655	
Ala Gly Tyr Thr Asp Lys Gln Arg Arg Asp Phe Leu Ser Glu Ala Ser			
660	665	670	
Ile Met Gly Gln Phe Asp His Pro Asn Ile Ile His Leu Glu Gly Val			
675	680	685	
Val Thr Lys Cys Lys Pro Val Met Ile Ile Thr Glu Tyr Met Glu Asn			
690	695	700	
Gly Ser Leu Asp Ala Phe Leu Arg Lys Asn Asp Gly Arg Phe Thr Val			
705	710	715	720
Ile Gln Leu Val Gly Met Leu Arg Gly Ile Gly Ser Gly Met Lys Tyr			
725	730	735	
Leu Ser Asp Met Ser Tyr Val His Arg Asp Leu Ala Ala Arg Asn Ile			
740	745	750	
Leu Val Asn Ser Asn Leu Val Cys Lys Val Ser Asp Phe Gly Met Ser			
755	760	765	
Arg Val Leu Glu Asp Asp Pro Glu Ala Ala Tyr Thr Thr Arg Gly Gly			
770	775	780	
Lys Ile Pro Ile Arg Trp Thr Ala Pro Glu Ala Ile Ala Tyr Arg Lys			
785	790	795	800
Phe Thr Ser Ala Ser Asp Val Trp Ser Tyr Gly Ile Val Met Trp Glu			
805	810	815	
Val Met Ser Tyr Gly Glu Arg Pro Tyr Trp Asp Met Ser Asn Gln Asp			
820	825	830	
Pro Asn Thr Ala Leu Leu Asp Pro Ser Ser Pro Glu Phe Ser Ala Val			
835	840	845	
Val Ser Val Gly Asp Trp Leu Gln Ala Ile Lys Met Asp Arg Tyr Lys			
850	855	860	
Asp Asn Phe Thr Ala Ala Gly Tyr Thr Thr Leu Glu Ala Val Val His			
865	870	875	880
Val Asn Gln Glu Asp Leu Ala Arg Ile Gly Ile Thr Ala Ile Thr His			
885	890	895	
Gln Asn Lys Ile Leu Ser Ser Val Gln Ala Met Arg Thr Gln Met Gln			
900	905	910	
Gln Met His Gly Arg Met Val Pro Val			
915	920		

<210> 53
<211> 444
<212> PRT
<213> Homo sapiens

<400> 53
Met Asn Asp Phe Gly Ile Lys Asn Met Asp Gln Val Ala Pro Val Ala
1 5 10 15
Asn Ser Tyr Arg Gly Thr Leu Lys Arg Gln Pro Ala Phe Asp Thr Phe
20 25 30
Asp Gly Ser Leu Phe Ala Val Phe Pro Ser Leu Asn Glu Glu Gln Thr
35 40 45
Leu Gln Glu Val Pro Thr Gly Leu Asp Ser Ile Ser His Asp Ser Ala
50 55 60
Asn Cys Glu Leu Pro Leu Leu Thr Pro Cys Ser Lys Ala Val Met Ser
65 70 75 80
Gln Ala Leu Lys Ala Thr Phe Ser Gly Phe Phe Trp Ala Thr Asn Glu
85 90 95
Phe Ser Leu Val Asn Val Asn Leu Gln Arg Phe Gly Met Asn Gly Gln
100 105 110
Met Leu Cys Asn Leu Gly Lys Glu Arg Phe Leu Glu Leu Ala Pro Asp
115 120 125
Phe Val Gly Asp Ile Leu Trp Glu His Leu Glu Gln Met Ile Lys Glu
130 135 140
Asn Gln Glu Lys Thr Glu Asp Gln Tyr Glu Glu Asn Ser His Leu Thr
145 150 155 160
Ser Val Pro His Trp Ile Asn Ser Asn Thr Leu Gly Phe Gly Thr Glu
165 170 175
Gln Ala Pro Tyr Gly Met Gln Thr Gln Asn Tyr Pro Lys Gly Gly Leu
180 185 190
Leu Asp Ser Met Cys Pro Ala Ser Thr Pro Ser Val Leu Ser Ser Glu
195 200 205
Gln Glu Phe Gln Met Phe Pro Lys Ser Arg Leu Ser Ser Val Ser Val
210 215 220
Thr Tyr Cys Ser Val Ser Gln Asp Phe Pro Gly Ser Asn Leu Asn Leu
225 230 235 240
Leu Thr Asn Asn Ser Gly Thr Pro Lys Asp His Asp Ser Pro Glu Asn
245 250 255
Gly Ala Asp Ser Phe Glu Ser Ser Asp Ser Leu Leu Gln Ser Trp Asn
260 265 270

Ser Gln Ser Ser Leu Leu Asp Val Gln Arg Val Pro Ser Phe Glu Ser
 275 280 285
 Phe Glu Asp Asp Cys Ser Gln Ser Leu Cys Leu Asn Lys Pro Thr Met
 290 295 300
 Ser Phe Lys Asp Tyr Ile Gln Glu Arg Ser Asp Pro Val Glu Gln Gly
 305 310 315 320
 Lys Pro Val Ile Pro Ala Ala Val Leu Ala Gly Phe Thr Gly Ser Gly
 325 330 335
 Pro Ile Gln Leu Trp Gln Phe Leu Leu Glu Leu Ser Asp Lys Ser
 340 345 350
 Cys Gln Ser Phe Ile Ser Trp Thr Gly Asp Gly Trp Glu Phe Lys Leu
 355 360 365
 Ala Asp Pro Asp Glu Val Ala Arg Arg Trp Gly Lys Arg Lys Asn Lys
 370 375 380
 Pro Lys Met Asn Tyr Glu Lys Leu Ser Arg Gly Leu Arg Tyr Tyr Tyr
 385 390 395 400
 Asp Lys Asn Ile Ile His Lys Thr Ser Gly Lys Arg Tyr Val Tyr Arg
 405 410 415
 Phe Val Cys Asp Leu Gln Asn Leu Leu Gly Phe Thr Pro Glu Glu Leu
 420 425 430
 His Ala Ile Leu Gly Val Gln Pro Asp Thr Glu Asp
 435 440

<210> 54
 <211> 260
 <212> PRT
 <213> Homo sapiens

<400> 54
 Met Ala Gly Ser Ala Met Ser Ser Lys Phe Phe Leu Val Ala Leu Ala
 1 5 10 15
 Ile Phe Phe Ser Phe Ala Gln Val Val Ile Glu Ala Asn Ser Trp Trp
 20 25 30
 Ser Leu Gly Met Asn Asn Pro Val Gln Met Ser Glu Val Tyr Ile Ile
 35 40 45
 Gly Ala Gln Pro Leu Cys Ser Gln Leu Ala Gly Leu Ser Gln Gly Gln
 50 55 60
 Lys Lys Leu Cys His Leu Tyr Gln Asp His Met Gln Tyr Ile Gly Glu
 65 70 75 80

<210> 55
<211> 719
<212> PRT
<213> *Homo sapiens*

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<400> 55
Met Ala Leu Arg Arg Ser Met Gly Arg Pro Gly Leu Pro Pro Leu Pro
  1           5           10          15

Leu Pro Pro Pro Arg Leu Gly Leu Leu Leu Ala Glu Ser Ala Ala
  20          25          30

Ala Gly Leu Lys Leu Met Gly Ala Pro Val Lys Leu Thr Val Ser Gln
  35          40          45

Gly Gln Pro Val Lys Leu Asn Cys Ser Val Glu Gly Met Glu Glu Pro
  50          55          60

Asp Ile Gln Trp Val Lys Asp Gly Ala Val Val Gln Asn Leu Asp Gln

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65	70	75	80												
Leu	Tyr	Ile	Pro	Val	Ser	Glu	Gln	His	Trp	Ile	Gly	Phe	Leu	Ser	Leu
						85				90					95
Lys	Ser	Val	Glu	Arg	Ser	Asp	Ala	Gly	Arg	Tyr	Trp	Cys	Gln	Val	Glu
						100			105					110	
Asp	Gly	Gly	Glu	Thr	Glu	Ile	Ser	Gln	Pro	Val	Trp	Leu	Thr	Val	Glu
						115			120					125	
Gly	Val	Pro	Phe	Phe	Thr	Val	Glu	Pro	Lys	Asp	Leu	Ala	Val	Pro	Pro
						130			135				140		
Asn	Ala	Pro	Phe	Gln	Leu	Ser	Cys	Glu	Ala	Val	Gly	Pro	Pro	Glu	Pro
						145			150				155		160
Val	Thr	Ile	Val	Trp	Trp	Arg	Gly	Thr	Thr	Lys	Ile	Gly	Gly	Pro	Ala
						165			170				175		
Pro	Ser	Pro	Ser	Val	Leu	Asn	Val	Thr	Gly	Val	Thr	Gln	Ser	Thr	Met
						180			185				190		
Phe	Ser	Cys	Glu	Ala	His	Asn	Leu	Lys	Gly	Leu	Ala	Ser	Ser	Arg	Thr
						195			200				205		
Ala	Thr	Val	His	Leu	Gln	Ala	Leu	Pro	Ala	Ala	Pro	Phe	Asn	Ile	Thr
						210			215				220		
Val	Thr	Lys	Leu	Ser	Ser	Ser	Asn	Ala	Ser	Val	Ala	Trp	Met	Pro	Gly
						225			230				235		240
Ala	Asp	Gly	Arg	Ala	Leu	Leu	Gln	Ser	Cys	Thr	Val	Gln	Val	Thr	Gln
						245			250				255		
Ala	Pro	Gly	Gly	Trp	Glu	Val	Leu	Ala	Val	Val	Val	Pro	Val	Pro	Pro
						260			265				270		
Phe	Thr	Cys	Leu	Leu	Arg	Asp	Leu	Val	Pro	Ala	Thr	Asn	Tyr	Ser	Leu
						275			280				285		
Arg	Val	Arg	Cys	Ala	Asn	Ala	Leu	Gly	Pro	Ser	Pro	Tyr	Ala	Asp	Trp
						290			295				300		
Val	Pro	Phe	Gln	Thr	Lys	Gly	Leu	Ala	Pro	Ala	Ser	Ala	Pro	Gln	Asn
						305			310				315		320
Leu	His	Ala	Ile	Arg	Thr	Asp	Ser	Gly	Leu	Ile	Leu	Glu	Trp	Glu	Glu
						325			330				335		
Val	Ile	Pro	Glu	Ala	Pro	Leu	Glu	Gly	Pro	Leu	Gly	Pro	Tyr	Lys	Leu
						340			345				350		
Ser	Trp	Val	Gln	Asp	Asn	Gly	Thr	Gln	Asp	Glu	Leu	Thr	Val	Glu	Gly
						355			360				365		
Thr	Arg	Ala	Asn	Leu	Thr	Gly	Trp	Asp	Pro	Gln	Lys	Asp	Leu	Ile	Val

370	375	380
Arg Val Cys Val Ser Asn Ala Val Gly Cys Gly Pro Trp Ser Gln Pro		
385	390	395
Leu Val Val Ser Ser His Asp Arg Ala Gly Gln Gln Gly Pro Pro His		
405	410	415
Ser Arg Thr Ser Trp Val Pro Val Val Leu Gly Val Leu Thr Ala Leu		
420	425	430
Val Thr Ala Ala Ala Leu Ala Leu Ile Leu Leu Arg Lys Arg Arg Lys		
435	440	445
Glu Thr Arg Phe Gly Gln Ala Phe Asp Ser Val Met Ala Arg Gly Glu		
450	455	460
Pro Ala Val His Phe Arg Ala Ala Arg Ser Phe Asn Arg Glu Arg Pro		
465	470	475
Glu Arg Ile Glu Ala Thr Leu Asp Ser Leu Gly Ile Ser Asp Glu Leu		
485	490	495
Lys Glu Lys Leu Glu Asp Val Leu Ile Pro Glu Gln Gln Phe Thr Leu		
500	505	510
Gly Arg Met Leu Gly Lys Gly Glu Phe Gly Ser Val Arg Glu Ala Gln		
515	520	525
Leu Lys Gln Glu Asp Gly Ser Phe Val Lys Val Ala Val Lys Met Leu		
530	535	540
Lys Ala Asp Ile Ile Ala Ser Ser Asp Ile Glu Glu Phe Leu Arg Glu		
545	550	560
Ala Ala Cys Met Lys Glu Phe Asp His Pro His Val Ala Lys Leu Val		
565	570	575
Gly Val Ser Leu Arg Ser Arg Ala Lys Gly Arg Leu Pro Ile Pro Met		
580	585	590
Val Ile Leu Pro Phe Met Lys His Gly Asp Leu His Ala Phe Leu Leu		
595	600	605
Ala Ser Arg Ile Gly Glu Asn Pro Phe Asn Leu Pro Leu Gln Thr Leu		
610	615	620
Ile Arg Phe Met Val Asp Ile Ala Cys Gly Met Glu Tyr Leu Ser Ser		
625	630	635
Arg Asn Phe Ile His Arg Asp Leu Ala Ala Arg Asn Cys Met Leu Ala		
645	650	655
Glu Asp Met Thr Val Cys Val Ala Asp Phe Gly Leu Ser Arg Lys Ile		
660	665	670
Tyr Ser Asp Cys Arg Tyr Ile Leu Thr Pro Gly Gly Leu Ala Glu Gln		

675	680	685
Pro Gly Gln Ala Glu His Gln Pro Glu Ser Pro Leu Asn Glu Thr Gln		
690	695	700
Arg Leu Leu Leu Leu Gln Gln Gly Leu Leu Pro His Ser Ser Cys		
705	710	715
<210> 56		
<211> 848		
<212> PRT		
<213> Homo sapiens		
<400> 56		
Met Cys Arg Ile Ala Gly Ala Leu Arg Thr Leu Leu Pro Leu Leu Ala		
1	5	10
Ala Leu Leu Gln Ala Ser Val Glu Ala Ser Gly Glu Ile Ala Leu Cys		
20	25	30
Lys Thr Gly Phe Pro Glu Asp Val Tyr Ser Ala Val Leu Ser Lys Asp		
35	40	45
Val His Glu Gly Gln Pro Leu Leu Asn Val Lys Phe Ser Asn Cys Asn		
50	55	60
Gly Lys Arg Lys Val Gln Tyr Glu Ser Ser Glu Pro Ala Asp Phe Lys		
65	70	75
Val Asp Glu Asp Gly Met Val Tyr Ala Val Arg Ser Phe Pro Leu Ser		
85	90	95
Ser Glu His Ala Lys Phe Leu Ile Tyr Ala Gln Asp Lys Glu Thr Gln		
100	105	110
Glu Lys Trp Gln Val Ala Val Lys Leu Ser Leu Lys Pro Thr Leu Thr		
115	120	125
Glu Glu Ser Val Lys Glu Ser Ala Glu Val Glu Glu Ile Val Phe Pro		
130	135	140
Arg Gln Phe Ser Lys His Ser Gly His Leu Gln Arg Gln Lys Arg Asp		
145	150	155
Trp Val Ile Pro Pro Ile Asn Leu Pro Glu Asn Ser Arg Gly Pro Phe		
165	170	175
Pro Gln Glu Leu Val Arg Ile Arg Ser Asp Arg Asp Lys Asn Leu Ser		
180	185	190
Leu Arg Tyr Ser Val Thr Gly Pro Gly Ala Asp Gln Pro Pro Thr Gly		
195	200	205
Ile Phe Ile Ile Asn Pro Ile Ser Gly Gln Leu Ser Val Thr Lys Pro		
210	215	220

Leu Asp Arg Glu Gln Ile Ala Arg Phe His Leu Arg Ala His Ala Val
 225 230 235 240
 Asp Ile Asn Gly Asn Gln Val Glu Asn Pro Ile Asp Ile Val Ile Asn
 245 250 255
 Val Ile Asp Met Asn Asp Asn Arg Pro Glu Phe Leu His Gln Val Trp
 260 265 270
 Asn Gly Thr Val Pro Glu Gly Ser Lys Pro Gly Thr Tyr Val Met Thr
 275 280 285
 Val Thr Ala Ile Asp Ala Asp Asp Pro Asn Ala Leu Asn Gly Met Leu
 290 295 300
 Arg Tyr Arg Ile Val Ser Gln Ala Pro Ser Thr Pro Ser Pro Asn Met
 305 310 315 320
 Phe Thr Ile Asn Asn Glu Thr Gly Asp Ile Ile Thr Val Ala Ala Gly
 325 330 335
 Leu Asp Arg Glu Lys Val Gln Gln Tyr Thr Leu Ile Ile Gln Ala Thr
 340 345 350
 Asp Met Glu Gly Asn Pro Thr Tyr Gly Leu Ser Asn Thr Ala Thr Ala
 355 360 365
 Val Ile Thr Val Thr Asp Val Asn Asp Asn Pro Pro Glu Phe Thr Ala
 370 375 380
 Met Thr Phe Tyr Gly Glu Val Pro Glu Asn Arg Val Asp Ile Ile Val
 385 390 395 400
 Ala Asn Leu Thr Val Thr Asp Lys Asp Gln Pro His Thr Pro Ala Trp
 405 410 415
 Asn Ala Val Tyr Arg Ile Ser Gly Gly Asp Pro Thr Gly Arg Phe Ala
 420 425 430
 Ile Gln Thr Asp Pro Asn Ser Asn Asp Gly Leu Val Thr Val Val Lys
 435 440 445
 Pro Ile Asp Phe Glu Thr Asn Arg Met Phe Val Leu Thr Val Ala Ala
 450 455 460
 Glu Asn Gln Val Pro Leu Ala Lys Gly Ile Gln His Pro Pro Gln Ser
 465 470 475 480
 Thr Ala Thr Val Ser Val Thr Val Ile Asp Val Asn Glu Asn Pro Tyr
 485 490 495
 Phe Ala Pro Asn Pro Lys Ile Ile Arg Gln Glu Glu Gly Leu His Ala
 500 505 510
 Gly Thr Met Leu Thr Thr Phe Thr Ala Gln Asp Pro Asp Arg Tyr Met
 515 520 525

Gln Gln Asn Ile Arg Tyr Thr Lys Leu Ser Asp Pro Ala Asn Trp Leu
 530 535 540
 Lys Ile Asp Pro Val Asn Gly Gln Ile Thr Thr Ile Ala Val Leu Asp
 545 550 555 560
 Arg Glu Ser Pro Asn Val Lys Asn Asn Ile Tyr Asn Ala Thr Phe Leu
 565 570 575
 Ala Ser Asp Asn Gly Ile Pro Pro Met Ser Gly Thr Gly Thr Leu Gln
 580 585 590
 Ile Tyr Leu Leu Asp Ile Asn Asp Asn Ala Pro Gln Val Leu Pro Gln
 595 600 605
 Glu Ala Glu Thr Cys Glu Thr Pro Asp Pro Asn Ser Ile Asn Ile Thr
 610 615 620
 Ala Leu Asp Tyr Asp Ile Asp Pro Asn Ala Gly Pro Phe Ala Phe Asp
 625 630 635 640
 Leu Pro Leu Ser Pro Val Thr Ile Lys Arg Asn Trp Thr Ile Thr Arg
 645 650 655
 Leu Asn Gly Asp Phe Ala Gln Leu Asn Leu Lys Ile Lys Phe Leu Glu
 660 665 670
 Ala Gly Ile Tyr Glu Val Pro Ile Ile Ile Thr Asp Ser Gly Asn Pro
 675 680 685
 Pro Lys Ser Asn Ile Ser Ile Leu Arg Val Lys Val Cys Gln Cys Asp
 690 695 700
 Ser Asn Gly Asp Cys Thr Asp Val Asp Arg Ile Val Gly Ala Gly Leu
 705 710 715 720
 Gly Thr Gly Ala Ile Ile Ala Ile Leu Leu Cys Ile Ile Ile Leu Leu
 725 730 735
 Ile Leu Val Leu Met Phe Val Val Trp Met Lys Arg Arg Asp Lys Glu
 740 745 750
 Arg Gln Ala Lys Gln Leu Leu Ile Asp Pro Glu Asp Asp Val Arg Asp
 755 760 765
 Asn Ile Leu Lys Tyr Asp Glu Glu Gly Gly Glu Glu Asp Gln Asp
 770 775 780
 Tyr Asp Leu Ser Gln Leu Gln Gln Pro Asp Thr Val Glu Pro Asp Ala
 785 790 795 800
 Ile Lys Pro Val Gly Ile Arg Arg Met Asp Glu Arg Pro Ile His Ala
 805 810 815
 Glu Pro Gln Tyr Pro Val Arg Ser Ala Ala Pro His Pro Gly Asp Ile
 820 825 830

Gly Asp Phe Ile Asn Glu Lys Thr Trp Pro Ile Gln Ser Leu His Leu
835 840 845

<210> 57
<211> 103
<212> PRT
<213> Homo sapiens

<400> 57
Met Glu Arg Val Lys Met Ile Asn Val Gln Arg Leu Leu Glu Ala Ala
1 5 10 15

Glu Phe Leu Glu Arg Arg Glu Arg Glu Cys Glu His Gly Tyr Ala Ser
20 25 30

Ser Phe Pro Ser Met Pro Ser Pro Arg Leu Gln His Ser Lys Pro Pro
35 40 45

Arg Arg Leu Ser Arg Ala Gln Lys His Ser Ser Gly Ser Ser Asn Thr
50 55 60

Ser Thr Ala Asn Arg Ser Thr His Asn Glu Leu Glu Lys Asn Arg Leu
65 70 75 80

Lys Asn Trp Leu Val Gly Arg Arg Asp Thr Arg Gly Met Lys Met Leu
85 90 95

Leu Lys Ala Ile Ala Val Ile
100

<210> 58
<211> 234
<212> PRT
<213> Homo sapiens

<400> 58
Met Glu Lys His Ile Asn Thr Phe Leu Gln Asn Val Gln Ile Leu Leu
1 5 10 15

Glu Ala Ala Ser Tyr Leu Glu Gln Ile Glu Lys Glu Asn Lys Lys Cys
20 25 30

Glu His Gly Tyr Ala Ser Ser Phe Pro Ser Met Pro Ser Pro Arg Leu
35 40 45

Gln His Ser Lys Pro Pro Arg Arg Leu Ser Arg Ala Gln Lys His Ser
50 55 60

Ser Gly Ser Ser Asn Thr Ser Thr Ala Asn Arg Ser Thr His Asn Glu

65	70	75	80
Leu Glu Lys Asn Arg Arg Ala His Leu Arg Leu Cys Leu Glu Arg Leu			
	85	90	95
Lys Val Leu Ile Pro Leu Gly Pro Asp Cys Thr Arg His Thr Thr Leu			
	100	105	110
Gly Leu Leu Asn Lys Ala Lys Ala His Ile Lys Lys Leu Glu Glu Ala			
	115	120	125
Glu Arg Lys Ser Gln His Gln Leu Glu Asn Leu Glu Arg Glu Gln Arg			
	130	135	140
Phe Leu Lys Trp Arg Leu Glu Gln Leu Gln Gly Pro Gln Glu Met Glu			
	145	150	155
160			
Arg Ile Arg Met Asp Ser Ile Gly Ser Thr Ile Ser Ser Asp Arg Ser			
	165	170	175
Asp Ser Glu Arg Glu Glu Ile Glu Val Asp Val Glu Ser Thr Glu Phe			
	180	185	190
Ser His Gly Glu Val Asp Asn Ile Ser Thr Thr Ser Ile Ser Asp Ile			
	195	200	205
Asp Asp His Ser Ser Leu Pro Ser Ile Gly Ser Asp Glu Gly Tyr Ser			
	210	215	220
Ser Ala Ser Val Lys Leu Ser Phe Thr Ser			
	225	230	

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<210> 59
<211> 329
<212> PRT
<213> Homo sapiens

<400> 59
Met Glu Ser Pro Ala Ser Ser Gln Pro Ala Ser Met Pro Gln Ser Lys
 1           5           10           15

Gly Lys Ser Lys Arg Lys Lys Asp Leu Arg Ile Ser Cys Met Ser Lys
 20           25           .           30

Pro Pro Ala Pro Asn Pro Thr Pro Pro Arg Asn Leu Asp Ser Arg Thr
 35           40           45

Phe Ile Thr Ile Gly Asp Arg Asn Phe Glu Val Glu Ala Asp Asp Leu
 50           55           60

Val Thr Ile Ser Glu Leu Gly Arg Gly Ala Tyr Gly Val Val Glu Lys
 65           70           75           80

Val Arg His Ala Gln Ser Gly Thr Ile Met Ala Val Lys Arg Ile Arg
 85           90           95

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Ala Thr Val Asn Ser Gln Glu Gln Lys Arg Leu Leu Met Asp Leu Asp
 100 105 110
 Ile Asn Met Arg Thr Val Asp Cys Phe Tyr Thr Val Thr Phe Tyr Gly
 115 120 125
 Ala Leu Phe Arg Glu Gly Asp Val Trp Ile Cys Met Glu Leu Met Asp
 130 135 140
 Thr Ser Leu Asp Lys Phe Tyr Arg Lys Val Leu Asp Lys Asn Met Thr
 145 150 155 160
 Ile Pro Glu Asp Ile Leu Gly Glu Ile Ala Val Ser Ile Val Arg Ala
 165 170 175
 Leu Glu His Leu His Ser Lys Leu Ser Val Ile His Arg Asp Val Lys
 180 185 190
 Pro Ser Asn Val Leu Ile Asn Lys Glu Gly His Val Lys Met Cys Asp
 195 200 205
 Phe Gly Ile Ser Gly Tyr Leu Val Asp Ser Val Ala Lys Thr Met Asp
 210 215 220
 Ala Gly Cys Lys Pro Tyr Met Ala Pro Glu Arg Ile Asn Pro Glu Leu
 225 230 235 240
 Asn Gln Lys Gly Tyr Asn Val Lys Ser Asp Val Trp Ser Leu Gly Ile
 245 250 255
 Thr Met Ile Glu Met Ala Ile Leu Arg Phe Pro Tyr Glu Ser Trp Gly
 260 265 270
 Thr Pro Phe Gln Gln Leu Lys Gln Val Val Glu Glu Pro Ser Pro Gln
 275 280 285
 Leu Pro Ala Asp Arg Phe Ser Pro Glu Phe Val Asp Phe Thr Ala Gln
 290 295 300
 Cys Leu Arg Lys Asn Pro Ala Glu Arg Met Ser Tyr Leu Glu Leu Ile
 305 310 315 320
 Gly Ala Asp Arg Phe Ser Pro Thr Pro
 325

<210> 60
 <211> 292
 <212> PRT
 <213> Homo sapiens

<400> 60
 Met Pro Glu Ile Arg Leu Arg His Val Val Ser Cys Ser Ser Gln Asp
 1 5 10 15

Ser Thr His Cys Ala Glu Asn Leu Leu Lys Ala Asp Thr Tyr Arg Lys
 20 25 30

Trp Arg Ala Ala Lys Ala Gly Glu Lys Thr Ile Ser Val Val Leu Gln
 35 40 45

Leu Glu Lys Glu Glu Gln Ile His Ser Val Asp Ile Gly Asn Asp Gly
 50 55 60

Ser Ala Phe Val Glu Val Leu Val Gly Ser Ser Ala Gly Gly Ala Gly
 65 70 75 80

Glu Gln Asp Tyr Glu Val Leu Leu Val Thr Ser Ser Phe Met Ser Pro
 85 90 95

Ser Glu Ser Arg Ser Gly Ser Asn Pro Asn Arg Val Arg Met Phe Gly
 100 105 110

Pro Asp Lys Leu Val Arg Ala Ala Glu Lys Arg Trp Asp Arg Val
 115 120 125

Lys Ile Val Cys Ser Gln Pro Tyr Ser Lys Asp Ser Pro Phe Gly Leu
 130 135 140

Ser Phe Val Arg Phe His Ser Pro Pro Asp Lys Asp Glu Ala Glu Ala
 145 150 155 160

Pro Ser Gln Lys Val Thr Val Thr Lys Leu Gly Gln Phe Arg Val Lys
 165 170 175

Glu Glu Asp Glu Ser Ala Asn Ser Leu Arg Pro Gly Ala Leu Phe Phe
 180 185 190

Ser Arg Ile Asn Lys Thr Ser Pro Val Thr Ala Ser Asp Pro Ala Gly
 195 200 205

Pro Ser Tyr Ala Ala Ala Thr Leu Gln Ala Ser Ser Ala Ala Ser Ser
 210 215 220

Ala Ser Pro Val Ser Arg Ala Ile Gly Ser Thr Ser Lys Pro Gln Glu
 225 230 235 240

Ser Pro Trp His Ser Phe Val Pro Asp Gly Ser Thr Val Ala Met Arg
 245 250 255

Ser Arg Ser Tyr Phe Leu Thr Ser Ser Met Gly Trp Cys Arg Lys Pro
 260 265 270

Glu Val Cys Ala Ile His Thr His Thr His Thr His Thr His Thr His
 275 280 285

Thr Arg Cys Ile
 290

<211> 266
<212> PRT
<213> Homo sapiens

<400> 61
Met Pro Glu Ile Arg Leu Arg His Val Val Ser Cys Ser Ser Gln Asp
1 5 10 15
Ser Thr His Cys Ala Glu Asn Leu Leu Lys Ala Asp Thr Tyr Arg Lys
20 25 30
Trp Arg Ala Ala Lys Ala Gly Glu Lys Thr Ile Ser Val Val Leu Gln
35 40 45
Leu Glu Lys Glu Glu Gln Ile His Ser Val Asp Ile Gly Asn Asp Gly
50 55 60
Ser Ala Phe Val Glu Val Leu Val Gly Ser Ser Ala Gly Gly Ala Gly
65 70 75 80
Glu Gln Asp Tyr Glu Val Leu Leu Val Thr Ser Ser Phe Met Ser Pro
85 90 95
Ser Glu Ser Arg Ser Gly Ser Asn Pro Asn Arg Val Arg Met Phe Gly
100 105 110
Pro Asp Lys Leu Val Arg Ala Ala Glu Lys Arg Trp Asp Arg Val
115 120 125
Lys Ile Val Cys Ser Gln Pro Tyr Ser Lys Asp Ser Pro Phe Gly Leu
130 135 140
Ser Phe Val Arg Phe His Ser Pro Pro Asp Lys Asp Glu Ala Glu Ala
145 150 155 160
Pro Ser Gln Lys Val Thr Val Thr Lys Leu Gly Gln Phe Arg Val Lys
165 170 175
Glu Glu Asp Glu Ser Ala Asn Ser Leu Arg Pro Gly Ala Leu Phe Phe
180 185 190
Ser Arg Ile Asn Lys Thr Ser Pro Val Thr Ala Ser Asp Pro Ala Gly
195 200 205
Pro Ser Tyr Ala Ala Ala Thr Leu Gln Ala Ser Ser Ala Ala Ser Ser
210 215 220
Ala Ser Pro Val Ser Arg Ala Ile Gly Ser Thr Ser Lys Pro Gln Glu
225 230 235 240
Ser Ser Asp Phe Gly Gly Val Glu Glu Glu Arg Ser Trp Arg Pro Gln
245 250 255
Ser Ile Pro Ile Pro Ser Ala Pro Gly Ser
260 265

<210> 62
<211> 247
<212> PRT
<213> Homo sapiens

<400> 62
Met Pro Glu Ile Arg Leu Arg His Val Val Ser Cys Ser Ser Gln Asp
1 5 10 15
Ser Thr His Cys Ala Glu Asn Leu Leu Lys Ala Asp Thr Tyr Arg Lys
20 25 30
Trp Arg Ala Ala Lys Ala Gly Glu Lys Thr Ile Ser Val Val Leu Gln
35 40 45
Leu Glu Lys Glu Glu Gln Ile His Ser Val Asp Ile Gly Asn Asp Gly
50 55 60
Ser Ala Phe Val Glu Val Leu Val Gly Ser Ser Ala Gly Gly Ala Gly
65 70 75 80
Glu Gln Asp Tyr Glu Val Leu Leu Val Thr Ser Ser Phe Met Ser Pro
85 90 95
Ser Glu Ser Arg Ser Gly Ser Asn Pro Asn Arg Val Arg Met Phe Gly
100 105 110
Pro Asp Lys Leu Val Arg Ala Ala Glu Lys Arg Trp Asp Arg Val
115 120 125
Lys Ile Val Cys Ser Gln Pro Tyr Ser Lys Asp Ser Pro Phe Gly Leu
130 135 140
Ser Phe Val Arg Phe His Ser Pro Pro Asp Lys Asp Glu Ala Glu Ala
145 150 155 160
Pro Ser Gln Lys Val Thr Val Thr Lys Leu Gly Gln Phe Arg Val Lys
165 170 175
Glu Glu Asp Glu Ser Ala Asn Ser Leu Arg Leu Glu Asp Tyr Met Ser
180 185 190
Asp Arg Val Gln Phe Val Ile Thr Ala Gln Glu Trp Asp Pro Ser Phe
195 200 205
Glu Glu Ala Leu Met Asp Asn Pro Ser Leu Ala Phe Val Arg Pro Arg
210 215 220
Trp Ile Tyr Ser Cys Asn Glu Lys Gln Lys Leu Leu Pro His Gln Leu
225 230 235 240
Tyr Gly Val Val Pro Gln Ala
245

<210> 63
<211> 624
<212> PRT
<213> Homo sapiens

<400> 63
Met Pro Glu Ile Arg Leu Arg His Val Val Ser Cys Ser Ser Gln Asp
1 5 10 15
Ser Thr His Cys Ala Glu Asn Leu Leu Lys Ala Asp Thr Tyr Arg Lys
20 25 30
Trp Arg Ala Ala Lys Ala Gly Glu Lys Thr Ile Ser Val Val Leu Gln
35 40 45
Leu Glu Lys Glu Glu Gln Ile His Ser Val Asp Ile Gly Asn Asp Gly
50 55 60
Ser Ala Phe Val Glu Val Leu Val Gly Ser Ser Ala Gly Gly Ala Gly
65 70 75 80
Glu Gln Asp Tyr Glu Val Leu Leu Val Thr Ser Ser Phe Met Ser Pro
85 90 95
Ser Glu Ser Arg Ser Gly Ser Asn Pro Asn Arg Val Arg Met Phe Gly
100 105 110
Pro Asp Lys Leu Val Arg Ala Ala Glu Lys Arg Trp Asp Arg Val
115 120 125
Lys Ile Val Cys Ser Gln Pro Tyr Ser Lys Asp Ser Pro Phe Gly Leu
130 135 140
Ser Phe Val Arg Phe His Ser Pro Pro Asp Lys Asp Glu Ala Glu Ala
145 150 155 160
Pro Ser Gln Lys Val Thr Val Thr Lys Leu Gly Gln Phe Arg Val Lys
165 170 175
Glu Glu Asp Glu Ser Ala Asn Ser Leu Arg Pro Gly Ala Leu Phe Phe
180 185 190
Ser Arg Ile Asn Lys Thr Ser Pro Val Thr Ala Ser Asp Pro Ala Gly
195 200 205
Pro Ser Tyr Ala Ala Ala Thr Leu Gln Ala Ser Ser Ala Ser Ser
210 215 220
Ala Ser Pro Val Ser Arg Ala Ile Gly Ser Thr Ser Lys Pro Gln Glu
225 230 235 240
Ser Pro Lys Gly Lys Arg Lys Leu Asp Leu Asn Gln Glu Glu Lys Lys
245 250 255
Thr Pro Ser Lys Pro Pro Ala Gln Leu Ser Pro Ser Val Pro Lys Arg
260 265 270

Pro Lys Leu Pro Ala Pro Thr Arg Thr Pro Ala Thr Ala Pro Val Pro
 275 280 285
 Ala Arg Ala Gln Gly Ala Val Thr Gly Lys Pro Arg Gly Glu Gly Thr
 290 295 300
 Glu Pro Arg Arg Pro Arg Ala Gly Pro Glu Glu Leu Gly Lys Ile Leu
 305 310 315 320
 Gln Gly Val Val Val Val Leu Ser Gly Phe Gln Asn Pro Phe Arg Ser
 325 330 335
 Glu Leu Arg Asp Lys Ala Leu Glu Leu Gly Ala Lys Tyr Arg Pro Asp
 340 345 350
 Trp Thr Arg Asp Ser Thr His Leu Ile Cys Ala Phe Ala Asn Thr Pro
 355 360 365
 Lys Tyr Ser Gln Val Leu Gly Leu Gly Gly Arg Ile Val Arg Lys Glu
 370 375 380
 Trp Val Leu Asp Cys His Arg Met Arg Arg Arg Leu Pro Ser Arg Arg
 385 390 395 400
 Tyr Leu Met Ala Gly Pro Gly Ser Ser Ser Glu Glu Asp Glu Ala Ser
 405 410 415
 His Ser Gly Gly Ser Gly Asp Glu Ala Pro Lys Leu Pro Gln Lys Gln
 420 425 430
 Pro Gln Thr Lys Thr Lys Pro Thr Gln Ala Ala Gly Pro Ser Ser Pro
 435 440 445
 Gln Lys Pro Pro Thr Pro Glu Glu Thr Lys Ala Ala Ser Pro Val Leu
 450 455 460
 Gln Glu Asp Ile Asp Ile Glu Gly Val Gln Ser Glu Gly Gln Asp Asn
 465 470 475 480
 Gly Ala Glu Asp Ser Gly Asp Thr Glu Asp Glu Leu Arg Arg Val Ala
 485 490 495
 Glu Gln Lys Glu His Arg Leu Pro Pro Gly Gln Glu Glu Asn Gly Glu
 500 505 510
 Asp Pro Tyr Ala Gly Ser Thr Asp Glu Asn Thr Asp Ser Glu Glu His
 515 520 525
 Gln Glu Pro Pro Asp Leu Pro Val Pro Glu Leu Pro Arg Phe Leu Pro
 530 535 540
 Gly Gln Ala Leu Leu Ser Leu Arg Gly Val Pro Trp Gly Arg Ala Ala
 545 550 555 560
 Glu Thr His Pro Ile Arg His Ser Leu Gln Trp Gly Ala Pro Trp His
 565 570 575

Ser Phe Val Pro Asp Gly Ser Thr Val Ala Met Arg Ser Arg Ser Tyr
580 585 590

Phe Leu Thr Ser Ser Met Gly Trp Cys Arg Lys Pro Glu Val Cys Ala
595 600 605

Ile His Thr His Thr His Thr His Thr His Thr Arg Cys Ile
610 615 620

<210> 64
<211> 567
<212> PRT
<213> Homo sapiens

<400> 64
Met Ala Gly Ala Ile Ala Ser Arg Met Ser Phe Ser Ser Leu Lys Arg
1 5 10 15

Lys Gln Pro Lys Thr Phe Thr Val Arg Ile Val Thr Met Asp Ala Glu
20 25 30

Met Glu Phe Asn Cys Glu Met Lys Trp Lys Gly Lys Asp Leu Phe Asp
35 40 45

Leu Val Cys Arg Thr Leu Gly Leu Arg Glu Thr Trp Phe Phe Gly Leu
50 55 60

Gln Tyr Thr Ile Lys Asp Thr Val Ala Trp Leu Lys Met Asp Lys Lys
65 70 75 80

Val Leu Asp His Asp Val Ser Lys Glu Glu Pro Val Thr Phe His Phe
85 90 95

Leu Ala Lys Phe Tyr Pro Glu Asn Ala Glu Glu Glu Leu Val Gln Glu
100 105 110

Ile Thr Gln His Leu Phe Phe Leu Gln Val Lys Lys Gln Ile Leu Asp
115 120 125

Glu Lys Ile Tyr Cys Pro Pro Glu Ala Ser Val Leu Leu Ala Ser Tyr
130 135 140

Ala Val Gln Ala Lys Tyr Gly Asp Tyr Asp Pro Ser Val His Lys Arg
145 150 155 160

Gly Phe Leu Ala Gln Glu Glu Leu Leu Pro Lys Arg Val Ile Asn Leu
165 170 175

Tyr Gln Met Thr Pro Glu Met Trp Glu Glu Arg Ile Thr Ala Trp Tyr
180 185 190

Ala Glu His Arg Gly Arg Ala Arg Asp Glu Ala Glu Met Glu Tyr Leu

195	200	205
Lys Ile Ala Gln Asp Leu Glu Met Tyr Gly Val Asn Tyr Phe Ala Ile		
210	215	220
Arg Asn Lys Lys Gly Thr Glu Leu Leu Leu Gly Val Asp Ala Leu Gly		
225	230	240
Leu His Ile Tyr Asp Pro Glu Asn Arg Leu Thr Pro Lys Ile Ser Phe		
245	250	255
Pro Trp Lys Asn Glu Ile Arg Asn Ile Ser Tyr Ser Asp Lys Glu Phe		
260	265	270
Thr Ile Lys Pro Leu Asp Lys Lys Ile Asp Val Phe Lys Phe Asn Ser		
275	280	285
Ser Lys Leu Arg Val Asn Lys Leu Ile Leu Gln Leu Cys Ile Gly Asn		
290	295	300
His Asp Leu Phe Met Arg Arg Arg Lys Ala Asp Ser Leu Glu Val Gln		
305	310	320
Gln Met Lys Ala Gln Ala Arg Glu Glu Lys Ala Arg Lys Gln Met Lys		
325	330	335
Glu Glu Ala Thr Met Ala Asn Glu Ala Leu Met Arg Ser Glu Glu Thr		
340	345	350
Ala Asp Leu Leu Ala Glu Lys Ala Gln Ile Thr Glu Glu Ala Lys		
355	360	365
Leu Leu Ala Gln Lys Ala Ala Glu Ala Glu Gln Glu Met Gln Arg Ile		
370	375	380
Lys Ala Thr Ala Ile Arg Thr Glu Glu Glu Lys Arg Leu Met Glu Gln		
385	390	400
Lys Val Leu Glu Ala Glu Val Leu Ala Leu Lys Met Ala Glu Glu Ser		
405	410	415
Glu Arg Arg Ala Lys Glu Ala Asp Gln Leu Lys Gln Asp Leu Gln Glu		
420	425	430
Ala Arg Glu Ala Glu Arg Arg Ala Lys Gln Lys Leu Leu Glu Ile Ala		
435	440	445
Thr Lys Pro Thr Tyr Pro Pro Met Asn Pro Ile Pro Ala Pro Leu Pro		
450	455	460
Pro Asp Ile Pro Ser Phe Asn Leu Ile Gly Asp Ser Leu Ser Phe Asp		
465	470	480
Phe Lys Asp Thr Asp Met Lys Arg Leu Ser Met Glu Ile Glu Lys Glu		
485	490	495
Lys Val Glu Tyr Met Glu Lys Ser Lys His Leu Gln Glu Gln Leu Asn		

500	505	510
Glu Leu Lys Thr Glu Ile Glu Ala Leu Lys Leu Lys Glu Arg Glu Thr		
515	520	525
Ala Leu Asp Ile Leu His Asn Glu Asn Ser Asp Arg Gly Gly Ser Ser		
530	535	540
Lys His Asn Thr Ile Lys Lys Leu Thr Leu Gln Ser Ala Lys Ser Arg		
545	550	555
Val Ala Phe Phe Glu Glu Leu		
565		

<210> 65
 <211> 134
 <212> PRT
 <213> Homo sapiens

<400> 65		
Met Arg Glu Arg Phe Asp Arg Phe Leu His Glu Lys Asn Cys Met Thr		
1	5	10
15		
Asp Leu Leu Ala Lys Leu Glu Ala Lys Thr Gly Val Asn Arg Ser Phe		
20	25	30
Ile Ala Leu Gly Val Ile Gly Leu Val Ala Leu Tyr Leu Val Phe Gly		
35	40	45
Tyr Gly Ala Ser Leu Leu Cys Asn Leu Ile Gly Phe Gly Tyr Pro Ala		
50	55	60
Tyr Ile Ser Ile Lys Ala Ile Glu Ser Pro Asn Lys Glu Asp Asp Thr		
65	70	75
80		
Gln Trp Leu Thr Tyr Trp Val Val Tyr Gly Val Phe Ser Ile Ala Glu		
85	90	95
Phe Phe Ser Asp Ile Phe Leu Ser Trp Phe Pro Phe Tyr Tyr Met Leu		
100	105	110
Lys Gln Ile Tyr Leu Glu Pro Pro Cys Ala Arg Phe Cys Ser Thr Ser		
115	120	125
Gly Arg Tyr Phe Gly Glu		
130		

<210> 66
 <211> 1278
 <212> PRT
 <213> Homo sapiens

<400> 66

Met Asp Leu Glu Gly Asp Arg Asn Gly Gly Ala Lys Lys Lys Asn Phe
 1 5 10 15

Phe Lys Leu Asn Asn Lys Ser Glu Lys Asp Lys Lys Glu Lys Lys Pro
 20 25 30

Thr Val Ser Val Phe Ser Met Phe Arg Tyr Ser Asn Trp Leu Asp Lys
 35 40 45

Leu Tyr Met Val Val Gly Thr Leu Ala Ala Ile Ile His Gly Ala Gly
 50 55 60

Leu Pro Leu Met Met Leu Val Phe Gly Glu Met Thr Asp Ile Phe Ala
 65 70 75 80

Asn Ala Gly Asn Leu Glu Asp Leu Met Ser Asn Ile Thr Asn Arg Ser
 85 90 95

Asp Ile Asn Asp Thr Gly Phe Phe Met Asn Leu Glu Glu Asp Met Thr
 100 105 110

Arg Tyr Ala Tyr Tyr Tyr Ser Gly Ile Gly Ala Gly Val Leu Val Ala
 115 120 125

Ala Tyr Ile Gln Val Ser Phe Trp Cys Leu Ala Ala Gly Arg Gln Ile
 130 135 140

His Lys Ile Arg Lys Gln Phe Phe His Ala Ile Met Arg Gln Glu Ile
 145 150 155 160

Gly Trp Phe Asp Val His Asp Val Gly Glu Leu Asn Thr Arg Leu Thr
 165 170 175

Asp Asp Val Ser Lys Ile Asn Glu Val Ile Gly Asp Lys Ile Gly Met
 180 185 190

Phe Phe Gln Ser Met Ala Thr Phe Phe Thr Gly Phe Ile Val Gly Phe
 195 200 205

Thr Arg Gly Trp Lys Leu Thr Leu Val Ile Leu Ala Ile Ser Pro Val
 210 215 220

Leu Gly Leu Ser Ala Ala Val Trp Ala Lys Ile Leu Ser Ser Phe Thr
 225 230 235 240

Asp Lys Glu Leu Ala Tyr Ala Lys Ala Gly Ala Val Ala Glu Glu
 245 250 255

Val Leu Ala Ala Ile Arg Thr Val Ile Ala Phe Gly Gly Gln Lys Lys
 260 265 270

Glu Leu Glu Arg Tyr Asn Lys Asn Leu Glu Glu Ala Lys Arg Ile Gly
 275 280 285

Ile Lys Lys Ala Ile Thr Ala Asn Ile Ser Ile Gly Ala Ala Phe Leu
 290 295 300

Leu Ile Tyr Ala Ser Tyr Ala Leu Ala Phe Trp Tyr Gly Thr Thr Leu
 305 310 315 320

Val Leu Ser Gly Glu Tyr Ser Ile Gly Gln Val Leu Thr Val Phe Phe
 325 330 335

Ser Val Leu Ile Gly Ala Phe Ser Val Gly Gln Ala Ser Pro Ser Ile
 340 345 350

Glu Ala Phe Ala Asn Ala Arg Gly Ala Ala Tyr Glu Ile Phe Lys Ile
 355 360 365

Ile Asp Asn Lys Pro Ser Ile Asp Ser Tyr Ser Lys Ser Gly His Lys
 370 375 380

Pro Asp Asn Ile Lys Gly Asn Leu Glu Phe Arg Asn Val His Phe Ser
 385 390 395 400

Tyr Pro Ser Arg Lys Glu Val Lys Ile Leu Lys Gly Leu Asn Leu Lys
 405 410 415

Val Gln Ser Gly Gln Thr Val Ala Leu Val Gly Asn Ser Gly Cys Gly
 420 425 430

Lys Ser Thr Thr Val Gln Leu Met Gln Arg Leu Tyr Asp Pro Thr Glu
 435 440 445

Gly Met Val Ser Val Asp Gly Gln Asp Ile Arg Thr Ile Asn Val Arg
 450 455 460

Phe Leu Arg Glu Ile Ile Gly Val Val Ser Gln Glu Pro Val Leu Phe
 465 470 475 480

Ala Thr Thr Ile Ala Glu Asn Ile Arg Tyr Gly Arg Glu Asn Val Thr
 485 490 495

Met Asp Glu Ile Glu Lys Ala Val Lys Glu Ala Asn Ala Tyr Asp Phe
 500 505 510

Ile Met Lys Leu Pro His Lys Phe Asp Thr Leu Val Gly Glu Arg Gly
 515 520 525

Ala Gln Leu Ser Gly Gly Gln Lys Gln Arg Ile Ala Ile Ala Arg Ala
 530 535 540

Leu Val Arg Asn Pro Lys Ile Leu Leu Asp Glu Ala Thr Ser Ala
 545 550 555 560

Leu Asp Thr Glu Ser Glu Ala Val Val Gln Val Ala Leu Asp Lys Ala
 565 570 575

Arg Lys Gly Arg Thr Thr Ile Val Ile Ala His Arg Leu Ser Thr Val
 580 585 590

Arg Asn Ala Asp Val Ile Ala Gly Phe Asp Asp Gly Val Ile Val Glu
 595 600 605

Lys Gly Asn His Asp Glu Leu Met Lys Glu Lys Gly Ile Tyr Phe Lys
 610 615 620 640
 Leu Val Thr Met Gln Thr Ala Gly Asn Glu Val Glu Leu Glu Asn Ala
 625 630 635 640
 Ala Asp Glu Ser Lys Ser Glu Ile Asp Ala Leu Glu Met Ser Ser Asn
 645 650 655
 Asp Ser Arg Ser Ser Leu Ile Arg Lys Arg Ser Thr Arg Arg Ser Val
 660 665 670
 Arg Gly Ser Gln Ala Gln Asp Arg Lys Leu Ser Thr Lys Glu Ala Leu
 675 680 685
 Asp Glu Ser Ile Pro Pro Val Ser Phe Trp Arg Ile Met Lys Leu Asn
 690 695 700 720
 Leu Thr Glu Trp Pro Tyr Phe Val Val Gly Val Phe Cys Ala Ile Ile
 705 710 715
 Asn Gly Gly Leu Gln Pro Ala Phe Ala Ile Ile Phe Ser Lys Ile Ile
 725 730 735
 Gly Val Phe Thr Arg Ile Asp Asp Pro Glu Thr Lys Arg Gln Asn Ser
 740 745 750
 Asn Leu Phe Ser Leu Leu Phe Leu Ala Leu Gly Ile Ile Ser Phe Ile
 755 760 765
 Thr Phe Phe Leu Gln Gly Phe Thr Phe Gly Lys Ala Gly Glu Ile Leu
 770 775 780
 Thr Lys Arg Leu Arg Tyr Met Val Phe Arg Ser Met Leu Arg Gln Asp
 785 790 795 800
 Val Ser Trp Phe Asp Asp Pro Lys Asn Thr Thr Gly Ala Leu Thr Thr
 805 810 815
 Arg Leu Ala Asn Asp Ala Ala Gln Val Lys Gly Ala Ile Gly Ser Arg
 820 825 830
 Leu Ala Val Ile Thr Gln Asn Ile Ala Asn Leu Gly Thr Gly Ile Ile
 835 840 845
 Ile Ser Phe Ile Tyr Gly Trp Gln Leu Thr Leu Leu Leu Ala Ile
 850 855 860
 Val Pro Ile Ile Ala Ile Ala Gly Val Val Glu Met Lys Met Leu Ser
 865 870 875 880
 Gly Gln Ala Leu Lys Asp Lys Lys Glu Leu Glu Gly Ala Gly Lys Ile
 885 890 895
 Ala Thr Glu Ala Ile Glu Asn Phe Arg Thr Val Val Ser Leu Thr Gln
 900 905 910

Glu Gln Lys Phe Glu His Met Tyr Ala Gln Ser Leu Gln Val Pro Tyr
 915 920 925
 Arg Asn Ser Leu Arg Lys Ala His Ile Phe Gly Ile Thr Phe Ser Phe
 930 935 940
 Thr Gln Ala Met Met Tyr Phe Ser Tyr Ala Gly Cys Phe Arg Phe Gly
 945 950 955 960
 Ala Tyr Leu Val Ala His Lys Leu Met Ser Phe Glu Asp Val Leu Leu
 965 970 975
 Val Phe Ser Ala Val Val Phe Gly Ala Met Ala Val Gly Gln Val Ser
 980 985 990
 Ser Phe Ala Pro Asp Tyr Ala Lys Ala Lys Ile Ser Ala Ala His Ile
 995 1000 1005
 Ile Met Ile Ile Glu Lys Thr Pro Leu Ile Asp Ser Tyr Ser Thr Glu
 1010 1015 1020
 Gly Leu Met Pro Asn Thr Leu Glu Gly Asn Val Thr Phe Gly Glu Val
 1025 1030 1035 1040
 Val Phe Asn Tyr Pro Thr Arg Pro Asp Ile Pro Val Leu Gln Gly Leu
 1045 1050 1055
 Ser Leu Glu Val Lys Lys Gly Gln Thr Leu Ala Leu Val Gly Ser Ser
 1060 1065 1070
 Gly Cys Gly Lys Ser Thr Val Val Gln Leu Leu Glu Arg Phe Tyr Asp
 1075 1080 1085
 Pro Leu Ala Gly Lys Val Leu Leu Asp Gly Lys Glu Ile Lys Arg Leu
 1090 1095 1100
 Asn Val Gln Trp Leu Arg Ala His Leu Gly Ile Val Ser Gln Glu Pro
 1105 1110 1115 1120
 Ile Leu Phe Asp Cys Ser Ile Ala Glu Asn Ile Ala Tyr Gly Asp Asn
 1125 1130 1135
 Ser Arg Val Val Ser Gln Glu Glu Ile Val Arg Ala Ala Lys Glu Ala
 1140 1145 1150
 Asn Ile His Ala Phe Ile Glu Ser Leu Pro Asn Lys Tyr Ser Thr Lys
 1155 1160 1165
 Val Gly Asp Lys Gly Thr Gln Leu Ser Gly Gly Gln Lys Gln Arg Ile
 1170 1175 1180
 Ala Ile Ala Arg Ala Leu Val Arg Gln Pro His Ile Leu Leu Leu Asp
 1185 1190 1195 1200
 Glu Ala Thr Ser Ala Leu Asp Thr Glu Ser Glu Lys Val Val Gln Glu
 1205 1210 1215

Ala Leu Asp Lys Ala Arg Glu Gly Arg Thr Cys Ile Val Ile Ala His
1220 1225 1230

Arg Leu Ser Thr Ile Gln Asn Ala Asp Leu Ile Val Val Phe Gln Asn
1235 1240 1245

Gly Arg Val Lys Glu His Gly Thr His Gln Gln Leu Leu Ala Gln Lys
1250 1255 1260

Gly Ile Tyr Phe Ser Met Val Ser Val Gln Ala Gly Thr Ile
1265 1270 1275

<210> 67
<211> 579
<212> PRT
<213> Homo sapiens

<400> 67
Met Asp Leu Glu Gly Asp Arg Asn Gly Gly Ala Lys Lys Lys Asn Phe
1 5 10 15

Phe Lys Leu Asn Asn Lys Ser Glu Lys Asp Lys Lys Glu Lys Lys Pro
20 25 30

Thr Val Ser Val Phe Ser Met Phe Arg Tyr Ser Asn Trp Leu Asp Lys
35 40 45

Leu Tyr Met Val Val Gly Thr Leu Ala Ala Ile Ile His Gly Ala Gly
50 55 60

Leu Pro Leu Met Met Leu Val Phe Gly Glu Met Thr Asp Ile Phe Ala
65 70 75 80

Asn Ala Gly Asn Leu Glu Asp Leu Met Ser Asn Ile Thr Asn Arg Ser
85 90 95

Asp Ile Asn Asp Thr Gly Phe Phe Met Asn Leu Glu Glu Asp Met Thr
100 105 110

Arg Tyr Ala Tyr Tyr Tyr Ser Gly Ile Gly Ala Gly Val Leu Val Ala
115 120 125

Ala Tyr Ile Gln Val Ser Phe Trp Cys Leu Ala Ala Gly Arg Gln Ile
130 135 140

His Lys Ile Arg Lys Gln Phe Phe His Ala Ile Met Arg Gln Glu Ile
145 150 155 160

Gly Trp Phe Asp Val His Asp Val Gly Glu Leu Asn Thr Arg Leu Thr
165 170 175

Asp Asp Val Ser Lys Ile Asn Glu Gly Ile Gly Asp Lys Ile Gly Met
180 185 190

Phe Phe Gln Ser Met Ala Thr Phe Phe Thr Gly Phe Ile Val Gly Phe

195	200	205
Thr Arg Gly Trp Lys Leu Thr Leu Val Ile Leu Ala Ile Ser Pro Val		
210	215	220
Leu Gly Leu Ser Ala Ala Val Trp Ala Lys Ile Leu Ser Ser Phe Thr		
225	230	235
240		
Asp Lys Glu Leu Leu Ala Tyr Ala Lys Ala Gly Ala Val Ala Glu Glu		
245	250	255
Val Leu Ala Ala Ile Arg Thr Val Ile Ala Phe Gly Gly Gln Lys Lys		
260	265	270
Glu Leu Glu Arg Tyr Asn Lys Asn Leu Glu Glu Ala Lys Arg Ile Gly		
275	280	285
Ile Lys Lys Ala Ile Thr Ala Asn Ile Ser Ile Gly Ala Ala Phe Leu		
290	295	300
Leu Ile Tyr Ala Ser Tyr Ala Leu Ala Phe Trp Tyr Gly Thr Thr Leu		
305	310	315
320		
Val Leu Ser Gly Glu Tyr Ser Ile Gly Gln Val Leu Thr Val Phe Phe		
325	330	335
Ser Val Leu Ile Gly Ala Phe Ser Val Gly Gln Ala Ser Pro Ser Ile		
340	345	350
Glu Ala Phe Ala Asn Ala Arg Gly Ala Ala Tyr Glu Ile Phe Lys Ile		
355	360	365
Ile Asp Asn Lys Pro Ser Ile Asp Ser Tyr Ser Lys Ser Gly His Lys		
370	375	380
Pro Asp Asn Ile Lys Gly Asn Leu Glu Phe Arg Asn Val His Phe Ser		
385	390	395
400		
Tyr Pro Ser Arg Lys Glu Val Lys Ile Leu Lys Gly Leu Asn Leu Lys		
405	410	415
Val Gln Ser Gly Gln Thr Val Ala Leu Val Gly Asn Ser Gly Cys Gly		
420	425	430
Lys Ser Thr Thr Val Gln Leu Met Gln Arg Leu Tyr Asp Pro Thr Glu		
435	440	445
Gly Met Val Ser Val Asp Gly Gln Asp Ile Arg Thr Ile Asn Val Arg		
450	455	460
Phe Leu Arg Glu Ile Ile Gly Val Val Ser Gln Glu Pro Val Leu Phe		
465	470	475
480		
Ala Thr Thr Ile Ala Glu Asn Ile Arg Tyr Gly Arg Glu Asn Val Thr		
485	490	495
Met Asp Glu Ile Glu Lys Ala Val Lys Glu Ala Asn Ala Tyr Asp Phe		

500	505	510
Ile Met Lys Leu Pro His Lys Phe Asp Thr Leu Val Gly Glu Arg Gly		
515	520	525
Ala Gln Leu Ser Gly Gly Gln Lys Gln Arg Ile Ala Ile Ala Arg Ala		
530	535	540
Leu Val Arg Asn Pro Lys Ile Leu Leu Asp Glu Ala Thr Ser Ala		
545	550	555
Leu Asp Thr Glu Ser Glu Ala Glu Val Gln Ala Ala Leu Asp Lys Val		
565	570	575
Ser Arg Leu		

<210> 68
 <211> 218
 <212> PRT
 <213> Homo sapiens

<400> 68		
Met Ser Arg Ser Lys Arg Asp Asn Asn Phe Tyr Ser Val Glu Ile Gly		
1	5	10
Asp Ser Thr Phe Thr Val Leu Lys Arg Tyr Gln Asn Leu Lys Pro Ile		
20	25	30
Gly Ser Gly Ala Gln Gly Ile Val Cys Ala Ala Tyr Asp Ala Ile Leu		
35	40	45
Glu Arg Asn Val Ala Ile Lys Lys Leu Ser Arg Pro Phe Gln Asn Gln		
50	55	60
Thr His Ala Lys Arg Ala Tyr Arg Glu Leu Val Leu Met Lys Cys Val		
65	70	75
Asn His Lys Asn Ile Ile Gly Leu Leu Asn Val Phe Thr Pro Gln Lys		
85	90	95
Ser Leu Glu Glu Phe Gln Asp Val Tyr Ile Val Met Glu Leu Met Asp		
100	105	110
Ala Asn Leu Cys Gln Val Ile Gln Met Glu Leu Asp His Glu Arg Met		
115	120	125
Ser Tyr Leu Leu Tyr Gln Met Leu Cys Gly Ile Lys His Leu His Ser		
130	135	140
Ala Gly Ile Ile His Arg Asp Leu Lys Pro Ser Asn Ile Val Val Lys		
145	150	155
Ser Asp Cys Thr Leu Lys Ile Leu Asp Phe Gly Leu Ala Arg Thr Ala		
165	170	175

Gly Thr Ser Phe Met Met Thr Pro Tyr Val Val Thr Arg Tyr Tyr Arg
180 185 190

Ala Pro Glu Val Ile Leu Gly Met Gly Tyr Lys Glu Asn Gly Gly Arg
195 200 205

Met Gly Lys Gly Ile Phe Thr Arg Leu Gln
210 215

<210> 69

<211> 307

<212> PRT

<213> Homo sapiens

<400> 69

Met Ser Arg Ser Lys Arg Asp Asn Asn Phe Tyr Ser Val Glu Ile Gly
1 5 10 15

Asp Ser Thr Phe Thr Val Leu Lys Arg Tyr Gln Asn Leu Lys Pro Ile
20 25 30

Gly Ser Gly Ala Gln Gly Ile Val Cys Ala Ala Tyr Asp Ala Ile Leu
35 40 45

Glu Arg Asn Val Ala Ile Lys Lys Leu Ser Arg Pro Phe Gln Asn Gln
50 55 60

Thr His Ala Lys Arg Ala Tyr Arg Glu Leu Val Leu Met Lys Cys Val
65 70 75 80

Asn His Lys Asn Ile Ile Gly Leu Leu Asn Val Phe Thr Pro Gln Lys
85 90 95

Ser Leu Glu Glu Phe Gln Asp Val Tyr Ile Val Met Glu Leu Met Asp
100 105 110

Ala Asn Leu Cys Gln Val Ile Gln Met Glu Leu Asp His Glu Arg Met
115 120 125

Ser Tyr Leu Leu Tyr Gln Met Leu Cys Gly Ile Lys His Leu His Ser
130 135 140

Ala Gly Ile Ile His Arg Asp Leu Lys Pro Ser Asn Ile Val Val Lys
145 150 155 160

Ser Asp Cys Thr Leu Lys Ile Leu Asp Phe Gly Leu Ala Arg Thr Ala
165 170 175

Gly Thr Ser Phe Met Met Thr Pro Tyr Val Val Thr Arg Tyr Tyr Arg
180 185 190

Ala Pro Glu Val Ile Leu Gly Met Gly Tyr Lys Glu Asn Val Asp Leu
195 200 205

Trp	Ser	Val	Gly	Cys	Ile	Met	Gly	Glu	Met	Val	Cys	His	Lys	Ile	Leu
210							215					220			
Phe	Pro	Gly	Arg	Asp	Tyr	Ile	Asp	Gln	Trp	Asn	Lys	Val	Ile	Glu	Gln
225							230				235			240	
Leu	Gly	Thr	Pro	Cys	Pro	Glu	Phe	Met	Lys	Lys	Leu	Gln	Pro	Thr	Val
								245		250			255		
Arg	Thr	Tyr	Val	Glu	Asn	Arg	Pro	Lys	Tyr	Ala	Gly	Tyr	Ser	Phe	Glu
							260			265			270		
Lys	Leu	Phe	Pro	Asp	Val	Leu	Phe	Pro	Ala	Asp	Ser	Glu	His	Asn	Lys
								275		280			285		
Leu	Lys	Ala	Ser	Gln	Tyr	Phe	Leu	Gln	Ile	Cys	Thr	Phe	Asn	Pro	Ile
								290		295			300		
Trp	Gly	Val													
															305

<210> 70
 <211> 339
 <212> PRT
 <213> Homo sapiens

<400> 70																
Met	Ser	Arg	Ser	Lys	Arg	Asp	Asn	Asn	Phe	Tyr	Ser	Val	Glu	Ile	Gly	
1											10			15		
Asp	Ser	Thr	Phe	Thr	Val	Leu	Lys	Arg	Tyr	Gln	Asn	Leu	Lys	Pro	Ile	
								20		25			30			
Gly	Ser	Gly	Ala	Gln	Gly	Ile	Val	Cys	Ala	Ala	Tyr	Asp	Ala	Ile	Leu	
								35		40			45			
Glu	Arg	Asn	Val	Ala	Ile	Lys	Lys	Leu	Ser	Arg	Pro	Phe	Gln	Asn	Gln	
								50		55			60			
Thr	His	Ala	Lys	Arg	Ala	Tyr	Arg	Glu	Leu	Val	Leu	Met	Lys	Cys	Val	
									65	70		75		80		
Asn	His	Lys	Asn	Ile	Ile	Gly	Leu	Leu	Asn	Val	Phe	Thr	Pro	Gln	Lys	
									85		90			95		
Ser	Leu	Glu	Glu	Phe	Gln	Asp	Val	Tyr	Ile	Val	Met	Glu	Leu	Met	Asp	
									100		105			110		
Ala	Asn	Leu	Cys	Gln	Val	Ile	Gln	Met	Glu	Leu	Asp	His	Glu	Arg	Met	
									115		120			125		
Ser	Tyr	Leu	Leu	Tyr	Gln	Met	Leu	Cys	Gly	Ile	Lys	His	Leu	His	Ser	
									130		135			140		
Ala	Gly	Ile	Ile	His	Arg	Asp	Leu	Lys	Pro	Ser	Asn	Ile	Val	Val	Lys	

145	150	155	160
Ser Asp Cys Thr Leu Lys Ile Leu Asp Phe Gly Leu Ala Arg Thr Ala			
165	170	175	
Gly Thr Ser Phe Met Met Thr Pro Tyr Val Val Thr Arg Tyr Tyr Arg			
180	185	190	
Ala Pro Glu Val Ile Leu Gly Met Gly Tyr Lys Glu Asn Val Asp Leu			
195	200	205	
Trp Ser Val Gly Cys Ile Met Gly Glu Met Val Cys His Lys Ile Leu			
210	215	220	
Phe Pro Gly Arg Asp Tyr Ile Asp Gln Trp Asn Lys Val Ile Glu Gln			
225	230	235	240
Leu Gly Thr Pro Cys Pro Glu Phe Met Lys Lys Leu Gln Pro Thr Val			
245	250	255	
Arg Thr Tyr Val Glu Asn Arg Pro Lys Tyr Ala Gly Tyr Ser Phe Glu			
260	265	270	
Lys Leu Phe Pro Asp Val Leu Phe Pro Ala Asp Ser Glu His Asn Lys			
275	280	285	
Leu Lys Ala Ser Gln Ala Arg Asp Leu Leu Ser Lys Met Leu Val Ile			
290	295	300	
Asp Ala Ser Lys Arg Ile Ser Val Asp Glu Ala Leu Gln His Pro Tyr			
305	310	315	320
Ile Asn Val Trp Tyr Asp Pro Ser Glu Ala Glu Ala Arg Ser Cys Lys			
325	330	335	
Leu Phe Ser			

<210> 71
 <211> 178
 <212> PRT
 <213> Homo sapiens

<400> 71			
Ala Arg Ser Gly Phe Tyr Arg Gln Glu Val Thr Lys Thr Ala Trp Glu			
1	5	10	15
Val Arg Ala Val Tyr Arg Asp Leu Gln Pro Val Gly Ser Gly Ala Tyr			
20	25	30	
Gly Ala Val Cys Ser Ala Val Asp Gly Arg Thr Gly Ala Lys Val Ala			
35	40	45	
Ile Lys Lys Leu Tyr Arg Pro Phe Gln Ser Glu Leu Phe Ala Lys Arg			
50	55	60	

Ala	Tyr	Arg	Glu	Leu	Arg	Leu	Leu	Lys	His	Met	Arg	His	Glu	Asn	Val
65				70				75				80			
Ile	Gly	Leu	Leu	Asp	Val	Phe	Thr	Pro	Asp	Glu	Thr	Leu	Asp	Asp	Phe
	85						90					95			
Thr	Asp	Phe	Tyr	Leu	Val	Met	Pro	Phe	Met	Gly	Thr	Asp	Leu	Gly	Lys
	100					105					110				
Leu	Met	Lys	His	Glu	Lys	Leu	Gly	Glu	Asp	Arg	Ile	Gln	Phe	Leu	Val
	115					120					125				
Tyr	Gln	Met	Leu	Lys	Gly	Leu	Arg	Tyr	Ile	His	Ala	Ala	Gly	Ile	Ile
	130					135					140				
His	Arg	Val	Ser	Pro	Gly	Gly	Glu	Ala	Ala	His	Gln	Pro	Ser	Pro	Ser
	145					150					155		160		
Ala	Ile	Pro	Pro	Pro	Arg	Pro	Thr	Cys	Glu	Asp	Val	Met	Gly	Ser	
							165				170		175		
Gly	Cys														

<210> 72
 <211> 648
 <212> PRT
 <213> Homo sapiens

<400> 72															
Met	Ser	Pro	Phe	Leu	Arg	Ile	Gly	Leu	Ser	Asn	Phe	Asp	Cys	Gly	Ser
1				5					10				15		
Cys	Gln	Ser	Cys	Gln	Gly	Glu	Ala	Val	Asn	Pro	Tyr	Cys	Ala	Val	Leu
				20				25				30			
Val	Lys	Glu	Tyr	Val	Glu	Ser	Glu	Asn	Gly	Gln	Met	Tyr	Ile	Gln	Lys
				35			40				45				
Lys	Pro	Thr	Met	Tyr	Pro	Pro	Trp	Asp	Ser	Thr	Phe	Asp	Ala	His	Ile
			50			55				60					
Asn	Lys	Gly	Arg	Val	Met	Gln	Ile	Ile	Val	Lys	Gly	Lys	Asn	Val	Asp
	65				70				75				80		
Leu	Ile	Ser	Glu	Thr	Thr	Val	Glu	Leu	Tyr	Ser	Leu	Ala	Glu	Arg	Cys
				85				90				95			
Arg	Lys	Asn	Asn	Gly	Lys	Thr	Glu	Ile	Trp	Leu	Glu	Leu	Lys	Pro	Gln
			100				105				110				
Gly	Arg	Met	Leu	Met	Asn	Ala	Arg	Tyr	Phe	Leu	Glu	Met	Ser	Asp	Thr
			115			120				125					

Lys Asp Met Asn Glu Phe Glu Thr Glu Gly Phe Phe Ala Leu His Gln
 130 135 140
 Arg Arg Gly Ala Ile Lys Gln Ala Lys Val His His Val Lys Cys His
 145 150 155 160
 Glu Phe Thr Ala Thr Phe Phe Pro Gln Pro Thr Phe Cys Ser Val Cys
 165 170 175
 His Glu Phe Val Trp Gly Leu Asn Lys Gln Gly Tyr Gln Cys Arg Gln
 180 185 190
 Cys Asn Ala Ala Ile His Lys Lys Cys Ile Asp Lys Val Ile Ala Lys
 195 200 205
 Cys Thr Gly Ser Ala Ile Asn Ser Arg Glu Thr Met Phe His Lys Glu
 210 215 220
 Arg Phe Lys Ile Asp Met Pro His Arg Phe Lys Val Tyr Asn Tyr Lys
 225 230 235 240
 Ser Pro Thr Phe Cys Glu His Cys Gly Thr Leu Leu Trp Gly Leu Ala
 245 250 255
 Arg Gln Gly Leu Lys Cys Asp Ala Cys Gly Met Asn Val His His Arg
 260 265 270
 Cys Gln Thr Lys Val Ala Asn Leu Cys Gly Ile Asn Gln Lys Leu Met
 275 280 285
 Ala Glu Ala Leu Ala Met Ile Glu Ser Thr Gln Gln Ala Arg Cys Leu
 290 295 300
 Arg Asp Thr Glu Gln Ile Phe Arg Glu Gly Pro Val Glu Ile Gly Leu
 305 310 315 320
 Pro Cys Ser Ile Lys Asn Glu Ala Arg Pro Pro Cys Leu Pro Thr Pro
 325 330 335
 Gly Lys Arg Glu Pro Gln Gly Ile Ser Trp Glu Ser Pro Leu Asp Glu
 340 345 350
 Val Asp Lys Met Cys His Leu Pro Glu Pro Glu Leu Asn Lys Glu Arg
 355 360 365
 Pro Ser Leu Gln Ile Lys Leu Lys Ile Glu Asp Phe Ile Leu His Lys
 370 375 380
 Met Leu Gly Lys Gly Ser Phe Gly Lys Val Phe Leu Ala Glu Phe Lys
 385 390 395 400
 Lys Thr Asn Gln Phe Phe Ala Ile Lys Ala Leu Lys Lys Asp Val Val
 405 410 415
 Leu Met Asp Asp Asp Val Glu Cys Thr Met Val Glu Lys Arg Val Leu
 420 425 430

Ser Leu Ala Trp Glu His Pro Phe Leu Thr His Met Phe Cys Thr Phe
435 440 445

Gln Thr Lys Glu Asn Leu Phe Phe Val Met Glu Tyr Leu Asn Gly Gly
450 455 460

Asp Leu Met Tyr His Ile Gln Ser Cys His Lys Phe Asp Leu Ser Arg
465 470 475 480

Ala Thr Phe Tyr Ala Ala Glu Ile Ile Leu Gly Leu Gln Phe Leu His
485 490 495

Ser Lys Gly Ile Val Tyr Arg Asp Leu Lys Leu Asp Asn Ile Leu Leu
500 505 510

Asp Lys Asp Gly His Ile Lys Ile Ala Asp Phe Gly Met Cys Lys Glu
515 520 525

Asn Met Leu Gly Asp Ala Lys Thr Asn Thr Phe Cys Gly Thr Pro Asp
530 535 540

Tyr Ile Ala Pro Glu Ile Leu Leu Gly Gln Lys Tyr Asn His Ser Val
545 550 555 560

Asp Trp Trp Ser Phe Gly Val Leu Leu Tyr Glu Met Leu Ile Gly Gln
565 570 575

Ser Pro Phe His Gly Gln Asp Glu Glu Glu Leu Phe His Ser Ile Arg
580 585 590

Met Asp Asn Pro Phe Tyr Pro Arg Trp Leu Glu Lys Glu Ala Lys Asp
595 600 605

Leu Leu Val Lys Val Arg Ser Glu Ala Lys Ser Val Phe Ile Arg Arg
610 615 620

Ala Leu Gly Leu Leu Val Ser Phe Leu Phe Leu Leu Val Ser Asn Leu
625 630 635 640

His Val Ala Asn Asn Asp Tyr Tyr
645